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U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

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Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

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*** *** ***

TRANSPORTATION RESEARCH CENTER

Indiana University
[redacted]Indiana[redacted]

ON-SITE AIR BAG INVESTIGATION

CASE NO. - 94-09
FLEET - PRIVATE VEHICLE
LOCATION - [redacted]KENTUCKY
ACCIDENT DATE -[redacted]1994

Submitted By:

[redacted]
Senior Staff Associate
[redacted]1994

Contract Number: DTNH22-94-D-17058

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
National Center for Statistics and Analysis
Washington, D.C. 20590

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the precrash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
TRC/IU Case No. 94-09		

4. Title and Subtitle	5. Report Date
On-Site Air Bag Investigation Private Vehicle Location - [redacted] Kentucky	[redacted], 1994
	6. Performing Organization Code
7. Author(s)	8. Performing Organization Report No.
[redacted]	TRC/IU 94-09, Task 0004
9. Performing Organization Name and Address	10. Work Unit No. (TRAIS)
Indiana University Transportation Research Center [redacted] Indiana [redacted]	11. Contract or Grant No. DTNH22-94-D-17058
	13. Type of Report and Period Covered
12. Sponsoring Agency Name and Address	[redacted] 1994
U.S. Department of Transportation (NRD-32) National Highway Traffic Safety Administration National Center for Statistics and Analysis Washington, D.C. 20590	14. Sponsoring Agency Code

15. Supplementary Notes

On-site air bag deployment investigation involving a 1991 Chevrolet Corsica

16. Abstract

This report covers an on-site investigation of an air bag deployment crash that involved a 1991 Chevrolet Corsica and a 1988 Chevrolet C-1500 pickup truck. The Corsica was traveling west in the westbound lane of a two-lane, undivided roadway. The C-1500 pickup was traveling east in the eastbound lane of the same two-lane, undivided roadway. The front left corner of the Corsica (case vehicle) impacted the front left corner of the the C-1500 pickup (vehicle #2) causing the case vehicle's driver side supplemental restraint (air bag) to deploy. The case vehicle rotated approximately 180 degrees counterclockwise after impact and came to rest on the north shoulder heading east. Vehicle #2 rotated approximately 90 degrees counterclockwise after impact and came to rest in the roadside grass on the south side of the roadway heading north. The case vehicle's driver (23 year-old male) was also restrained by the available, active, three-point, lap and shoulder belt and sustained, according to his medical records, fatal head injuries which included: a concussion; bilateral subarachnoid hemorrhages; left depressed skull fracture with left cerebral contusions and laceration; intraventricular hemorrhage in the third ventricle; and a basilar skull fracture to the posterior cranial fossa. In addition, he sustained a lacerated spleen and minor soft tissue injuries. The driver of vehicle #2 (28 year-old female) was not wearing the available, active, three-point, lap and shoulder belt and sustained, according to the driver and her medical records, moderate injuries which included: bilateral bimalleolar ankle fractures, a right dislocated ankle, two lacerations to the left lower leg, and minor soft tissue injuries.

17. Key Words	18. Distribution Statement
Motor Vehicle Traffic Accident Air Bag Deployment Injury Severity	General Public

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
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TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 94-09

FLEET - PRIVATE VEHICLE
LOCATION [redacted] KENTUCKY

SUMMARY

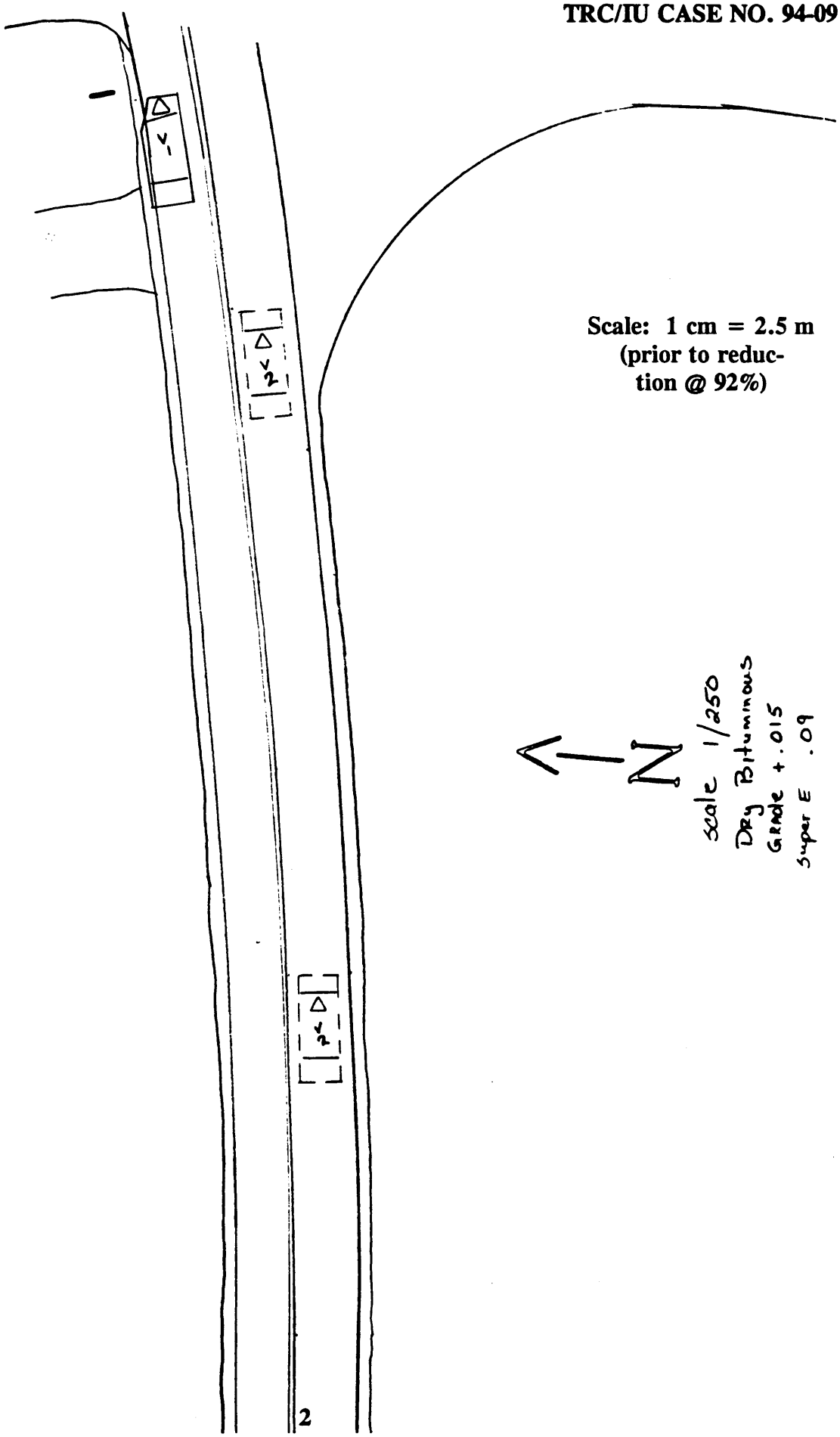
This report concerns a motor vehicle crash involving an air bag equipped 1991 Chevrolet Corsica and a 1988 Chevrolet C-1500 pickup truck occurring on [redacted] 1994 at [redacted], near [redacted] Kentucky on a State road.

The Corsica was traveling west in the westbound lane of a two-lane, undivided roadway when it impacted the C-1500 pickup which was traveling east in the eastbound lane of the same two-lane, undivided roadway. The Corsica rotated approximately 180 degrees counterclockwise after impact and came to rest on the north shoulder heading east. The C-1500 pickup rotated approximately 90 degrees counterclockwise after impact and came to rest in the roadside grass on the south side of the roadway heading north.

The front left of the Corsica impacted the front left of the C-1500 pickup. The CDCs were determined to be: 12-FLAE-7 for the Corsica and 12-FYEW-5 for the C-1500. The CRASHPC reconstruction program, damage and trajectory algorithm, was used on the impact (highest severity) to the Corsica. The Total, Longitudinal, and Lateral Delta Vs are respectively: 35 k.p.h. (22 m.p.h.), -35 k.p.h. (-22 m.p.h.), and +0 k.p.h. (+0 m.p.h).

The 1991 Chevrolet Corsica was equipped with a driver supplemental restraint system (air bag) which deployed as a result of the frontal impact. The driver of the case vehicle (23 year-old male) was also restrained by the available, active, three-point, lap and shoulder belt and sustained, according to his medical records, fatal head injuries which included: a concussion; bilateral subarachnoid hemorrhages; left depressed skull fracture with left cerebral contusions and laceration; intraventricular hemorrhage in the third ventricle; and a basilar skull fracture to the posterior cranial fossa. In addition, he sustained a lacerated spleen and minor soft tissue injuries. The driver of the Corsica was listed on the Police Accident Report as sustaining a "K" (fatal) injury as a result of this crash. The driver of the C-1500 pickup (28 year-old female) was not wearing the available, active, three-point, lap and shoulder belt and sustained, according to her medical records, moderate injuries which included: bilateral bimalleolar ankle fractures, a right dislocated ankle, two lacerations to the left lower leg, and minor soft tissue injuries. The driver of vehicle #2 was listed on the Police Accident Report as sustaining an "A" (incapacitating) injury as a result of this crash.

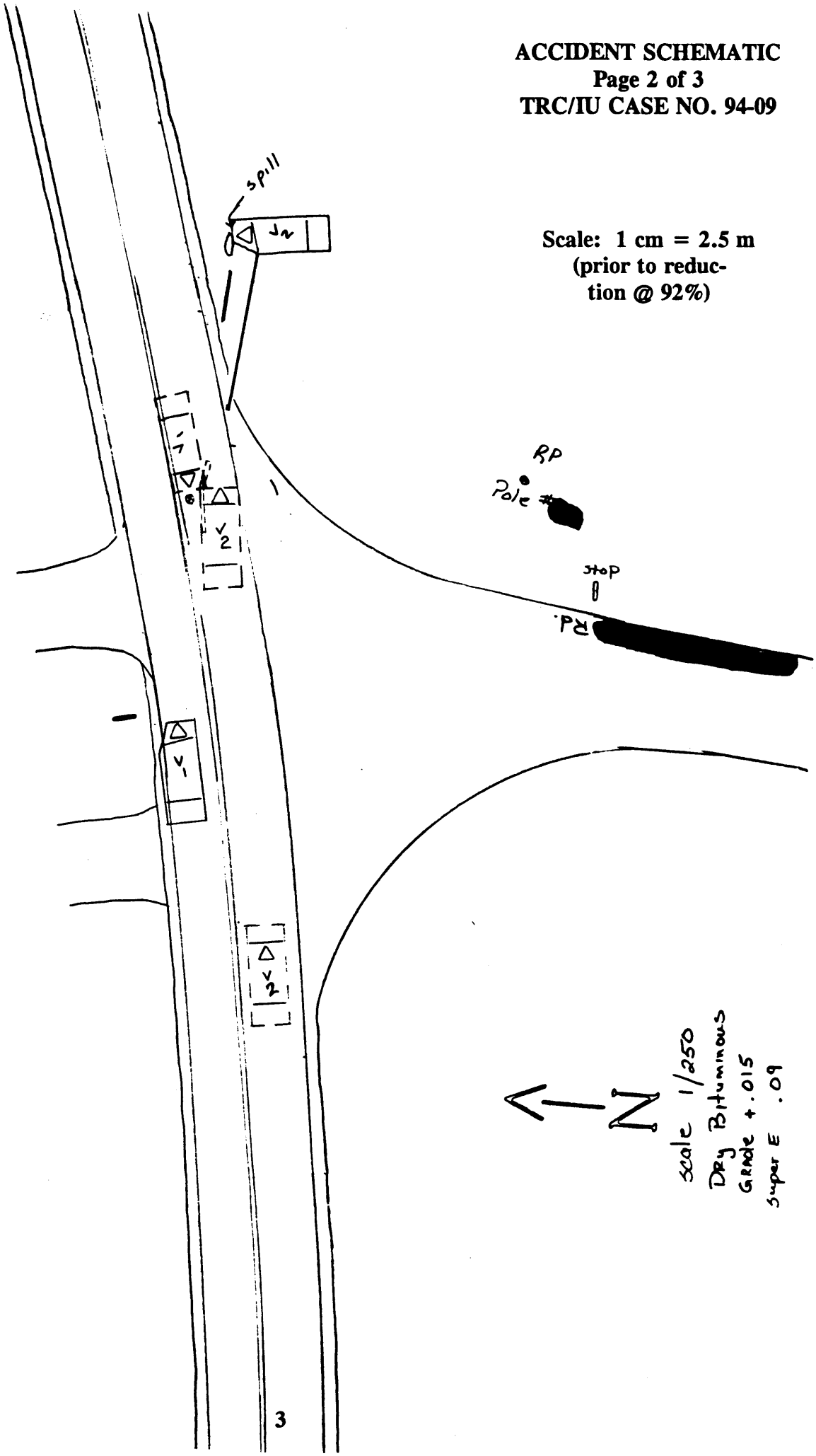
ACCIDENT SCHEMATIC
Page 1 of 3
TRC/IU CASE NO. 94-09



Scale: 1 cm = 2.5 m
(prior to reduction @ 92%)

ACCIDENT SCHEMATIC
Page 2 of 3
TRC/IU CASE NO. 94-09

Scale: 1 cm = 2.5 m
(prior to reduction @ 92%)



ACCIDENT SCHEMATIC
Page 3 of 3
TRC/IU CASE NO. 94-09

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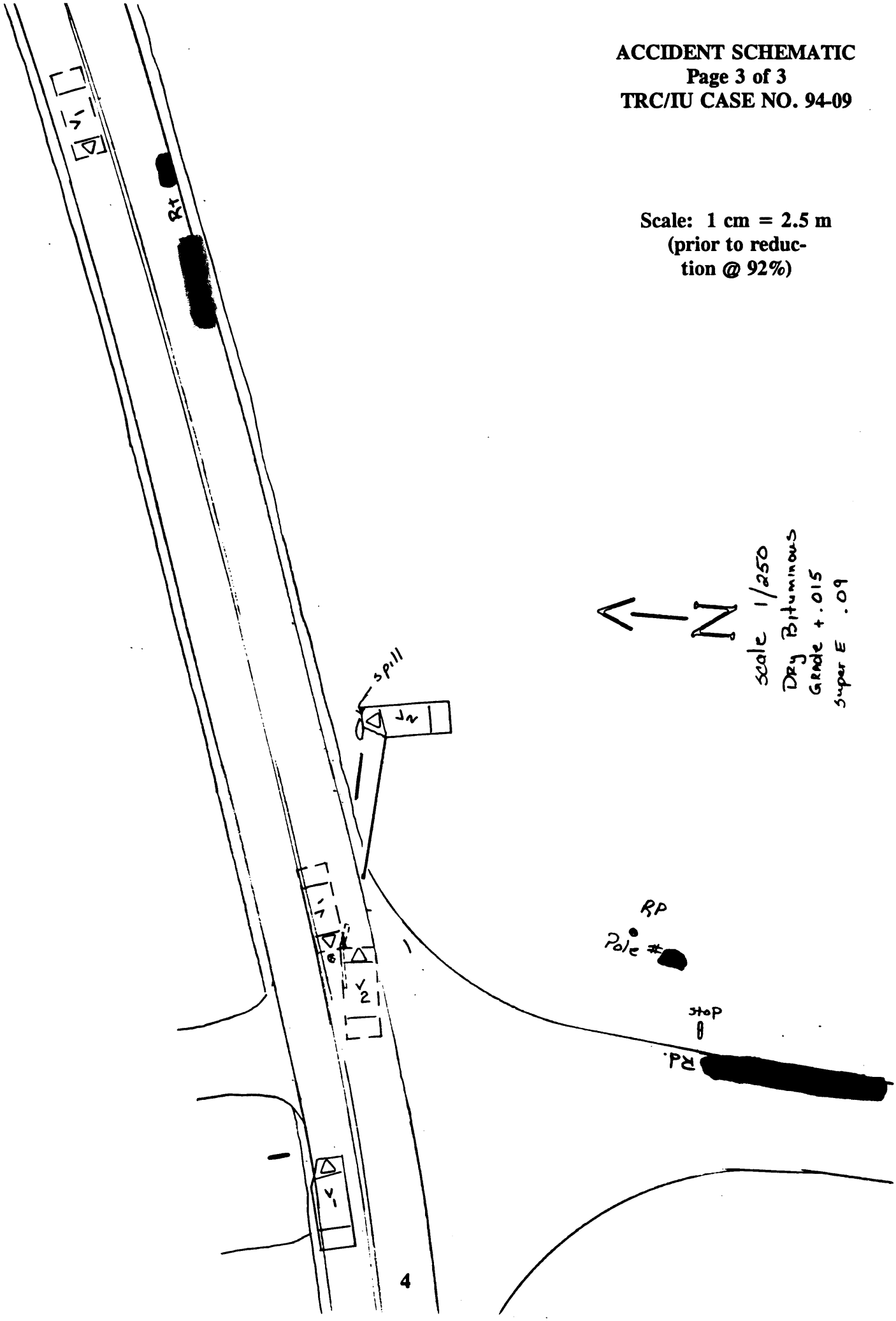
(prior to reduction @ 92%)



TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 94-09

FLEET - PRIVATE VEHICLE
LOCATION [redacted] KENTUCKY

ACCIDENT DATA

Location/Street:	**State Road near an intersection with a County Road**
City/Township:	**[redacted] County, near [redacted] Kentucky**
Area/Type:	**Rural/agricultural**
Accident Date/Time:	**[redacted] 1994, @ [redacted] a.m.**
Investigating Police Agency:	**[redacted] County Sheriff Department**
Accident Type:	**Car / Pickup - head-on, offset left**
Occupant Injury Severity (air bag vehicle):	**Concussion, unresponsive (AIS-5)**

AMBIENT CONDITIONS

Light Conditions:	**Daylight**
Weather Condition:	**Clear**
Precipitation:	**Dry**
Road Surface:	**Asphalt**

ROADWAY

	Case Vehicle	**Vehicle #2**
Location:	**State road**	**State road**
Number of Travel Lanes:	**2-lanes, undivided**	**2-lanes, undivided**
Width:	**3.0 meters (9.8 feet)**	**3.3 meters (10.8 feet)**
Surface Type:	**Asphalt**	**Asphalt**
Median:	**None**	**None**
Shoulders:	**0.6 meters (2.0 feet)**	**0.5 meters (1.6 feet)**
Vertical alignment:	**9 % grade, positive to the west**	**4 % grade, positive to the east**

ROADWAY (CONT'D.)

	Case Vehicle	Vehicle #2
Horizontal Alignment:	Curve right	Curve left
Estimated Coefficient of Friction:	0.75	0.75
Traffic Density:	Light	Light

TRAFFIC CONTROLS

	Case Vehicle	Vehicle #2
Signals:	None	None
Signs:	Curve warning sign	Curve warning sign
Markings:	Solid yellow center line for westbound traffic and broken yellow center line for eastbound traffic	Solid yellow center line for eastbound traffic and broken yellow center line for westbound traffic
Speed Limit:	89 k.p.h. (55 m.p.h.)	89 k.p.h. (55 m.p.h.)

VEHICLES

	Case Vehicle	Vehicle #2
Year:	1991	1988
Make:	Chevrolet	Chevrolet
Model:	Corsica LT	C-1500
Body Type:	4-door sedan	Pickup, one-half ton
V.I.N.	1G1LT53G2MY-----	1GCDC14ZXJZ-----
Color:	Blue	Red
Mileage:	73,139 km (45,446 miles)	118,406 kilometers (73,574 miles)
Engine:	2.2 liters, 4 cylinders	4.3 liters, V6
Transmission:	3-speed, automatic	5-speed, manual
Steering:	Power-assisted, rack-and-pinion	Power-assisted, worm-and-roller

VEHICLES (CONT'D.)

	Case Vehicle	Vehicle #2
Brakes:	Power-assisted, 4-wheel disc brakes	Power-assisted, 4-wheel hydraulic
Padding:	Steering wheel and hub, sunvisors, dash, "A"-pillars, and side door surfaces	Steering wheel, sunvisors, dash, "A"-pillars, and side door surfaces
Active Restraints:	3-point, manual, lap and shoulder belts in front and rear outboard seating positions; lap belt only at rear center position	3-point, manual, lap and shoulder belts in front outboard seating position; lap belt only at front center position
Passive Restraints:	Factory installed driver supplemental restraint system (air bag)	None
Defects:	None	None
Fleet:	Private vehicle	Private vehicle
Tow status:	Towed due to damage	Towed due to damage

VEHICLE DAMAGE

EXTERIOR	Case Vehicle	Vehicle #2
Deployment Impact		
Event number:	One	One
Object Struck:	Vehicle #2	Case Vehicle
Damage location		
Damaged Plane:	Front	Front
Vertical Location On Plane:	Bumper level	Bumper level
Direct Begins:	At left bumper corner	At left bumper corner
Length Direct:	40 cm (15.7 in)	56 cm (22.0 in)
Field L:	132 cm (52.0 in)	170 cm (66.9 in)
C_1:	121 cm (47.6 in)	81 cm (31.9 in)
C_2:	32 cm (12.6 in)	33 cm (13.0 in)
C_3:	22 cm (8.7 in)	18 cm (7.1 in)
C_4:	14 cm (5.5 in)	3 cm (1.2 in)
C_5:	4 cm (1.6 in)	0 cm (0.0 in)
C_6:	1 cm (0.4 in)	0 cm (0.0 in)
D:	-46 cm (-18.1 in)	-57 cm (-22.4 in)

VEHICLE DAMAGE (CONT'D.)

EXTERIOR (Cont'd.)	Case Vehicle	Vehicle #2
Deployment Impact (Cont'd.)		
Maximum Crush:	218 cm (85.8 in)	81 cm (31.9 in)
Location:	C_1	C_1
CDC:	12-FLAE-7	12-FYEW-5
Damaged Components:	Bumper, grille, left front fender and wheel assembly, left "A"-pillar, roof, left doors, and hood	Bumper, grille, left front fender and wheel assembly, roof, left doors, and hood
INTERIOR		
Damaged Components:	Windshield, roof, "A"-pillar, driver door	Steering wheel, toepan, driver's door, left lower dash
Other Evidence of Occupant Contact:	Lower left dash cracked	Lower left dash, steering wheel
Manual Restraint System Failures:	None	None
Seat Performance Failures:	None	None
REPAIR		
Cost Estimate:	Totalled	Totalled

VEHICLE VELOCITY ESTIMATES*

Highest Delta "V"	Case Vehicle	Vehicle #2
Reconstruction Program:	CRASH3PC	CRASH3PC
Program Algorithm:	Damage only	Damage only
Travel Speed:	81 k.p.h. (50 m.p.h.)	72 k.p.h. (45 m.p.h.)
Total Delta "V":	35 k.p.h. (22 m.p.h.)	26 k.p.h. (16 m.p.h.)

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* Because of the fairly narrow corner engagement, this reconstruction and the resultant velocity estimates can be considered "at best" a borderline reconstruction. It is this contractor's opinion that the results are too low. Another factor which affects the results is that the CRASH3PC program measures the velocity change at the center of the vehicle. In a crash involving a ssevere off-set, such as this crash, it is this contractor's opinion that the Longitudinal Delta "V" at the front outboard seating positions can vary significantly from the value at the center of the vehicle.

VEHICLE VELOCITY ESTIMATES (CONT'D.)

Highest Delta "V" (Cont'd.)	Case Vehicle	Vehicle #2
Longitudinal Delta "V":	-35 k.p.h. (-22 m.p.h.)	-25 k.p.h. (-16 m.p.h.)
Lateral Delta "V":	0 k.p.h. (0 m.p.h.)	+ 5 k.p.h. (+ 3 m.p.h.)

COLLISION SEQUENCE

Pre-Crash: The case vehicle (Corsica) was traveling west in the westbound lane of a two-lane, undivided State road and was traversing a nine percent positive grade into a right-hand curve. Vehicle #2 (C-1500 pickup) was traveling east in the eastbound lane of the same two-lane, undivided State road and was cresting a hill in a left-hand curve, having just traversed a four percent positive grade. Based on the physical evidence at the scene and the interview with the driver of vehicle #2, the driver of the case vehicle made no pre-crash avoidance maneuvers. The case vehicle, for whatever reason, failed to negotiate the right-hand curve and continued straight ahead, crossing into the on-coming eastbound lane, prior to impact. Based on the physical evidence at the scene and the interview with the driver of vehicle #2, she attempted to brake and steer towards her right. Vehicle #2, with its brakes locked, continued essentially straight ahead prior to impact. The crash occurred in the curved, eastbound lane, just east of the hillcrest.

Crash: The front left corner of the case vehicle impacted the front left corner of the vehicle #2 causing the case vehicle's driver side supplemental restraint (air bag) to deploy. The hood of vehicle #2 contacted the case vehicle's left "A"-pillar and roof. The case vehicle rotated approximately 180 degrees counterclockwise after impact and came to rest on the north shoulder heading east. Vehicle #2 rotated approximately 90 degrees counterclockwise after impact and came to rest in the roadside grass on the south side of the roadway heading north.

Post-Crash:

Occupants: The driver of the case vehicle remained inside the vehicle at final rest and was found, according to the Police and on-scene witnesses, belted leaning back to the right. He was unconscious and was unable, because of his injuries, to exit the case vehicle.

Police: The investigating police agency was notified of the accident within three minutes and arrived on-scene within seven minutes. Traffic control procedures were established and emergency medical, fire, and towing services were called to assist.

COLLISION SEQUENCE (CONT'D.)

Rescue: The driver was transported by ambulance to a medical facility where he was treated and transported by helicopter to a trauma center where he was pronounced dead.

Removal: Following the police investigation, the case vehicle was towed from the scene.

HUMAN FACTORS/OCCUPANT DATA

	Case Vehicle	Vehicle #2
Driver:	23 year-old male	28 year-old female
Height:	188 cm (74 in)	160 cm (63 in)
Weight:	77 kg (170 lbs)	75 kg (165 lbs)
Occupation:	Student	Student/homemaker
Active Restraint System/Usage:	3-point lap and shoulder/used	3-point lap and shoulder/not used
Usage Source:	Police Accident Report, witnesses	Driver
Eye glasses/contacts:	Eye glasses	None
Vehicle Familiarity:	Fairly familiar, Grandfather's vehicle	Very familiar
Route Familiarity:	Very familiar	Daily, during the school year
Trip Plan:	Driving home from work	Driving to school
Manner of Leaving Scene:	Ambulance	Ambulance
Type of Medical Treatment:	Emergency room and lifeflight	Hospitalized

CASE VEHICLE DRIVER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Concussion, unconscious, unresponsive to verbal or painful stimuli	160824.5,0	3	"B"-pillar, left	{Probable}

CASE VEHICLE DRIVER INJURIES (CONT'D.)

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Cerebral contusions, inferior portions of left frontal, temporal, and parietal lobes	140612.3,2	1	"B"-pillar, left	{Probable}
Intraventricular hemorrhage in left and right horns of third ventricle	140678.4,9	1	"B"-pillar, left	{Probable}
Subarachnoid hemorrhage, lateral right hemisphere	140684.3,1	1	"B"-pillar, left	{Probable}
Subarachnoid hemorrhage, lateral left hemisphere	140684.3,2	1	"B"-pillar, left	{Probable}
Laceration left parietal-temporal lobes	140688.4,2	1	"B"-pillar, left	{Probable}
Laceration in hilum of spleen {moderate}	544224.3,2	1	Left door armrest	{Probable}
Fracture, open, depressed, left parietal-occipital region {unknown if vault or basilar}	150404.3,2	1	"B"-pillar, left	{Probable}
Fracture, basilar, occipital portion of posterior cranial fossa	150200.3,8	1	"D"-ring portion of left "B"-pillar	{Probable}
Abrasion lower lip	290202.1,8	1	Air bag	{Certain}
Contusions face, unspecified location	290402.1,9	6	Air bag	{Probable}
Contusions left chest	490402.1,2	6	Torso belt	{Probable}

VEHICLE #2 DRIVER INJURIES

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Bimalleolar fractures right ankle--comminuted fibula at diaphyseal/metaphyseal junction and comminuted medial malleolus	850210.2,1	2	Toe pan	{Certain}
Dislocation medial right ankle--slight overriding of distal tibia and talus	850210.2,1	2	Toe pan	{Certain}

VEHICLE #2 DRIVER INJURIES (CONT'D.)

Description of Injury	A.I.S.	Source of Data	Injury Mechanism	Certainty
Bimalleolar fractures left ankle--slightly displaced medial and nondisplaced lateral malleoli	851612.2,2	2	Toe pan	{Certain}
Avulsive laceration left shin/calf involving the muscle belly in the anterior compartment	840600.2,2	2	Foot controls	{Probable}
Laceration left proximal shin--overlying tibial tubercle	890602.1,2	2	Left dash	{Certain}
Abrasion left knee	890202.1,2	3	Left dash	{Certain}
Abrasions right knee and lower extremity	890202.1,1	3	Left dash	{Certain}
Lacerations {scratches} right lower extremity	890600.1,1	3	Left dash	{Probable}

DRIVER KINEMATICS

The initial posture of the case vehicle driver is not known at any point along the pre-crash (i.e., as he was proceding in a westerly direction in the westbound lane up the nine percent positive grade and into the right-hand curve) or "at crash" travel path (across the centerline and into the eastbound lane). Based on the lack of physical evidence present at the scene pertaining to the case vehicle (i.e., no pre-impact skidmarks) and the driver of vehicle #2's observation that she thought, at first, that the case vehicle was going to turn left (southward) onto the intersecting roadway, the case vehicle driver most likely made no or little pre-crash avoidance maneuvers. It is possible that immediately prior to the crash, the case vehicle driver fell asleep, or nodded-off momentarily, because he had just finished working an eight-hour shift (i.e., 12 a.m. - 8 a.m.). It is also possible that, just prior to the impact sequence, the driver might have been slumped forward towards the steering wheel and air bag module. Based on the surrogate interview with the driver's mother, the driver most likely had his hands on the steering wheel and his feet in the toepan area.

Based on the vehicle and scene inspections and occupant kinematic principles, the case vehicle's impact with the vehicle #2 deployed the driver's side supplemental restraint system (air bag) and caused the driver to move forward loading the torso portion of his active, three-point lap and shoulder belt. The driver's forward movement, however, was restricted because: (1) the air bag deployed and (2) the torso portion of the driver's active belt system locked up, preventing him from contacting the steering wheel; the steering wheel rim showed no evidence of contact or deformation. Due to the driver's use of his available restraints, the windshield and windshield header area were not contacted. The case

DRIVER KINEMATICS (CONT'D.)

vehicle's driver restraints (i.e., the air bag and the belts) appear to have performed as designed by absorbing as much energy as possible, specifically in the thoracic area.

Based on the vehicle and scene inspections, the case vehicle's impact with vehicle #2 not only deployed the driver's side air bag but most likely sent the driver forward and leftward towards the intruding left "A"-pillar[1], roof siderail, and, most likely, side interior door surface. Unfortunately, the amount of intrusion (which was significant) to the left "A"-pillar, roof, siderail, door panel, and "B"-pillar could not be determined because of the damage caused during the driver's extraction. The intrusion of the left door's armrest most likely caused the spleen laceration. However, based on the driver's extensive, left-and-rear, head injuries (i.e., skull fractures and brain lesions), it is most likely that the left parietal-occipital area of the driver's head struck the left "B"-pillar and/or rearward roof siderail, rather than the left "A"-pillar and/or forward roof siderail. Simultaneously, the occipital area of the driver's head most likely struck the "D"-ring on the left "B"-pillar causing the occipital laceration and skull fracture to the driver's posterior cranial fossa. If the driver's head had slumped forward because of drowsiness, then the energy generated by the air bag's deployment could have propelled the driver rearward. In addition, the counterclockwise vehicle rotation generated by the case vehicle's impact with vehicle #2, would have caused the driver's head to rebound rearward and toward the left "B"-pillar. Certainly the driver's head directly contact a rigid structural support. The forensic pathologist who performed the autopsy made the following conclusion: ***"A pattern of contusions within the brain is suggestive of an axial movement of the head and brain in a front to back motion with subsequent contusion of the undersurface of the brain. The pattern of depressed indented skull fracture is suggestive of a linear portion of the inner surface of the vehicle impacting with the side of this young man's head"***; see page 100R.

Based on the vehicle and scene inspection and the blood present on the driver's seatback, the driver moved to his right as the case vehicle completed its approximate 180 degree counterclockwise rotation to final rest. At final rest--based on police reported witness accounts and on-site emergency medical records, the case vehicle driver was leaning back against his seatback with his head tilted to the right and blood was coming from his nose, mouth, and ears. Furthermore, based on the scene inspection and the on-site police photographs[2], the case vehicle was heading east at final rest.

AIR BAG SYSTEM	DRIVER AIR BAG
Deployment Threshold:	14-24 k.p.h. (9-15 m.p.h.)
Airbag Diameter (seam-to-seam, deflated):	63 centimeters (24.8 inches)

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[1] See SELECTED PHOTOGRAPHS, Photographs # 42 and # 43, pages 21 and 22, which show the direct contact to the case vehicle's left "A"-pillar from vehicle #2.

[2] See SELECTED PHOTOGRAPHS, Photographs # 09 and # 11, pages 5 and 6.

AIR BAG SYSTEM	DRIVER AIR BAG
Number of Vent Holes:	Two
Vent Hole Diameter:	2 centimeters (0.8 inches)
Vent Hole Clock Positions:	3 and 9 o'clock
Generant Residue:	Unknown, none reported by police or found during vehicle inspection

ACCIDENT COLLISION MEASUREMENT TABLE

U.S. Department of Transportation
National Highway Traffic Safety Administration

ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 10 | Case Number–Stratum 9409

ACCIDENT COLLISION DIAGRAM

LEVEL I
PHYSICAL EVIDENCE ABSENT

To be accomplished when there is no physical evidence present at the scene:

- approximate vehicle orientation at impact and final rest
- applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, etc.)
- applicable traffic controls (e.g., speed limit)
- north arrow placed on diagram
- sketch required

LEVEL II
PHYSICAL EVIDENCE PRESENT

In addition to the level I tasks noted above, the following must be accomplished when physical evidence is present:

- document reference point and reference line relative to physical features present at the scene
- scaled documentation of all accident induced physical evidence
- scaled documentation of all roadside objects contacted
- roadway surface type and condition of applicable roadways
- grade measurements for all applicable roadways and at location of rollover initiation
- scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
  - a) physical evidence, or
  - b) reconstructed accident dynamics

CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle	250	80	
Surface Type	Bit	Bit	
Surface Condition	DRY	DRY	
Grade (v/h) Measurement (between impact and final rest)	1%	2%	
Grade (v/h) Measurement (at location of rollover initiation)	N/A		

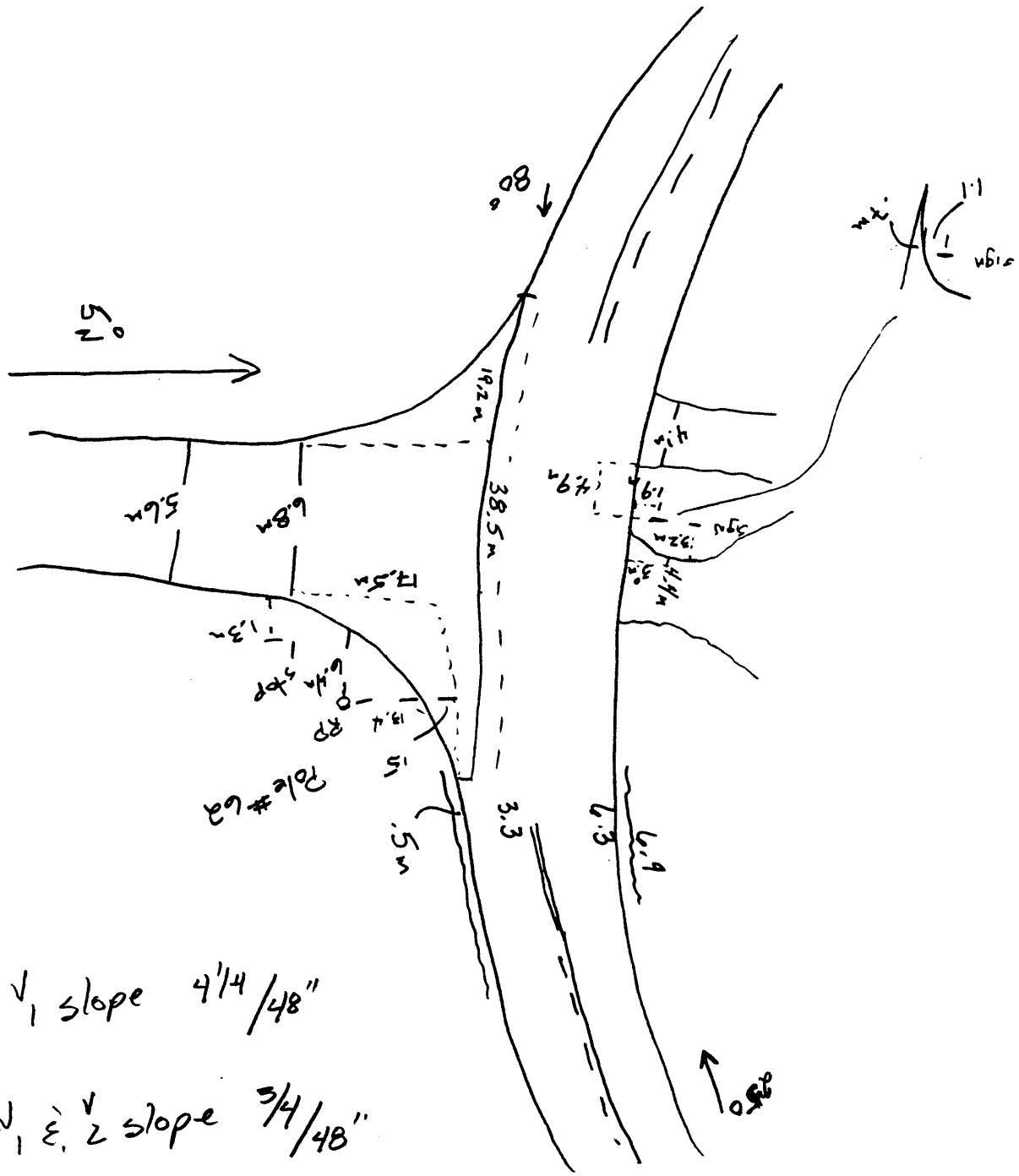
Reference Point: Utility Pole [redacted] SW/CORNER

Reference line: South EDGE of Kt Rt [redacted]

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line

HS Form 431A (1/94)

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
START of SKID LF	4.1 W	2 N
START of Gouge LF	1.7 W	1.8 N
POI	2 W	2.5 N
END of Gouge LF	1.2 W	1.6 N
END of SKID LF	.5 W	1.3 N
V2 FRP LF	9.3 E	3.3 S
V1 GLASS		
2ND Gouge START LF	1.8 E	.2 S
" " END LF	9.3 E	3.3 S
BAT. RADIATOR SPILL	9.4 - 10.5 E	1.9 S - 2.2 S
UNK gouge	6.3 E - 8.6 E	.9 1.9 S
MARK END	2.7 E	1.9
BEG	2 E	1.6

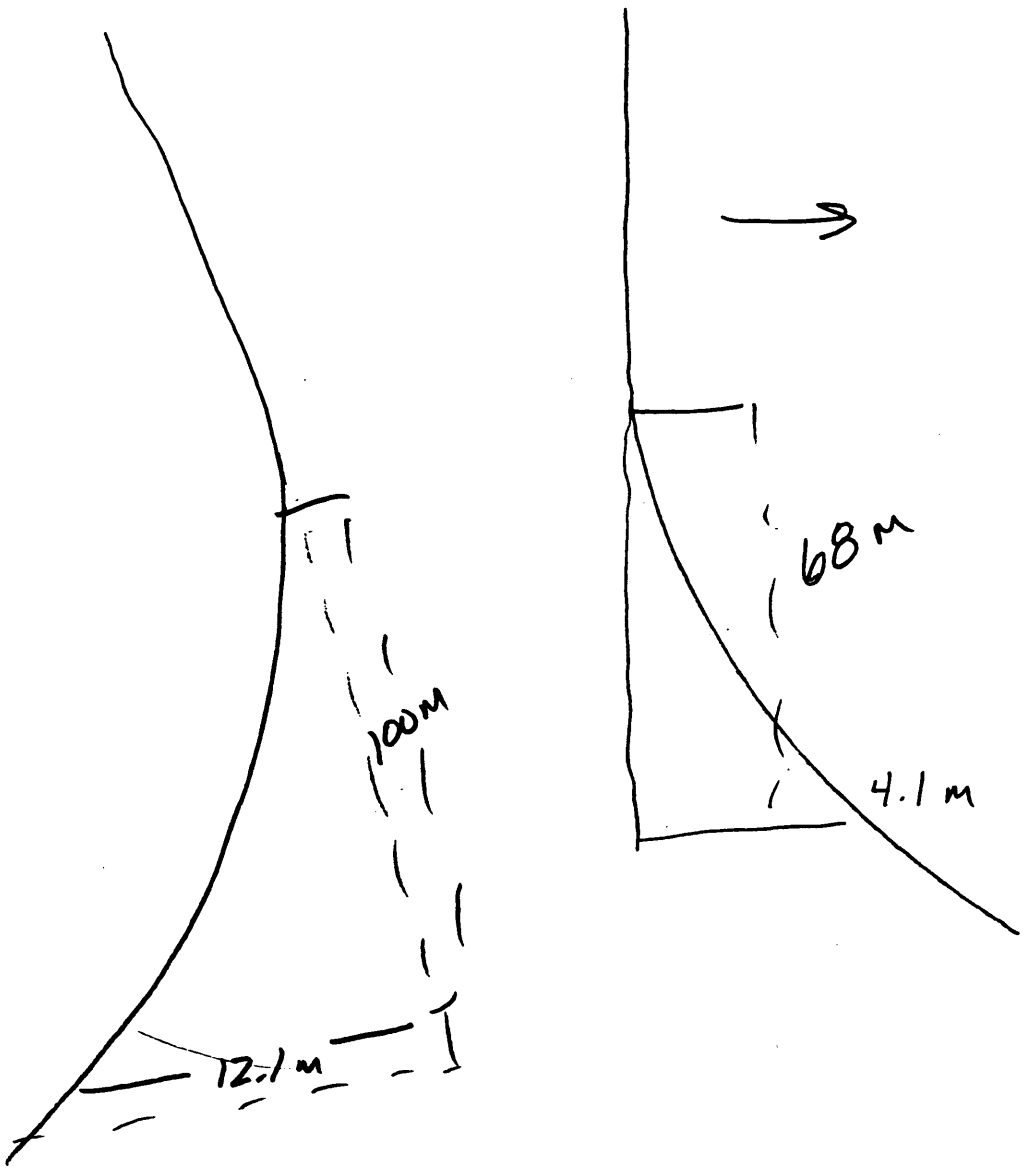


V_1 slope 4 1/4 /48"

@ impact V_1 & V_2 slope 3/4 /48"

V_2 slope 1 3/4 /48"

cross slope super E 4 1/4 /48


100m
12.1 m
68 m
4.1 m

Appendix A:

POLICE ACCIDENT REPORT

INVESTIGATING AGENCY Co. Sheriff | KILLED 1 | INJURED 1 | INVESTIGATION COMPLETE ☒ INCOMPLETE ☐ | H. & R. NO | DAY | MILITARY TIME | MO. | DAY | YEAR

TRAFFICWAY NO. OR NAME KY | MILES 4 | N ☐ S ☐ E ☐ W ☐ IN OF | TOWN | COUNTY

INTERSECTION ☒ KY | BETWEEN STREETS | ONE WAY YES (NO) | RAMP YES (NO) FROM TO | T/D MI. FT. | N ☐ S ☐ E ☐ W ☐ MILEPOST | 55

UNIT 1

REMOVED TO | NO. OCCUPANTS 1

OPERATORS LIC. NO. | STATE KY | RESTRICTION ☐ NON-RESTRICTION ☒ | CODE N/A | COMPLIANCE YES ☒ NO ☐

OPERATOR—LAST NAME | FIRST | M.I. | DATE OF BIRTH 23

STREET NO. & NAME | CODE

CITY | STATE Ky | ZIP CODE

OWNER—LAST NAME | FIRST

OWNER—ADDRESS Ky

MOTOR CARRIER: NAME & ADDRESS

VEH. YR. 91 | MAKE Chev | MODEL Cel | TYPE 4d | STATE KY | REGISTRATION NO. | YEAR 95

VEH. INS. CO. | ADDRESS

FIRE YES ☐ NO ☒ | OVERTURNED YES ☐ NO ☒ | EST TRAVEL SPEED BETWEEN 40 MPH AND 45 MPH | SUBCOMPACT ☐ COMPACT ☐ FULL SIZE ☒ INTERMED. ☐

VEH. ID NUMBER 1G1LT53G2M4

HAZARDOUS CARGO YES ☐ NO ☐ | CARGO CODE | TYPE CARGO | NUMBER OF TRAILERS

TRUCK LENGTH FT. ___ IN. ___ | WIDTH FT. ___ IN. ___ | SINGLE UNIT ☐ COMBINATION ☐ | NO. AXLES

DAMAGED UNIT NUMBER ONE

OTHER PROP.	1
NO DAMAGE	2
MINOR	3
MODERATE	4
SEVERE	5

DAMAGE TO TRUCK NO. 1

OTHER PROP.	1
NO DAMAGE	2
MINOR	3
MODERATE	4
SEVERE	5

UNIT 2

REMOVED TO | NO. OCCUPANTS 1

OPERATORS LIC. NO | STATE KY | RESTRICTION ☐ NON-RESTRICTION ☒ | CODE N/A | COMPLIANCE YES ☒ NO ☐

OPERATOR—LAST NAME | FIRST | M.I. | DATE OF BIRTH 28

STREET NO. & NAME | CODE

CITY | STATE Ky | ZIP CODE

OWNER—LAST NAME | FIRST

OWNER-ADDRESS Ky

MOTOR CARRIER: NAME & ADDRESS

VEH. YR. 88 | MAKE Chev | MODEL Csr | TYPE PU | STATE KY | REGISTRATION NO. | YEAR 94

VEH. INS. CO. | ADDRESS

FIRE YES ☐ NO ☒ | OVERTURNED YES ☐ NO ☒ | EST TRAVEL SPEED BETWEEN 45 MPH AND 55 MPH | SUBCOMPACT ☐ COMPACT ☐ FULL SIZE ☒ INTERMED. ☐

VEH. ID NUMBER 1GCDC14ZXJZ

HAZARDOUS CARGO YES ☐ NO ☐ | CARGO CODE | TYPE CARGO | NUMBER OF TRAILERS

TRUCK LENGTH FT. ___ IN. ___ | WIDTH FT. ___ IN. ___ | SINGLE UNIT ☐ COMBINATION ☐ | NO. AXLES

DAMAGED UNIT NUMBER TWO

OTHER PROP.	1
NO DAMAGE	2
MINOR	3
MODERATE	4
SEVERE	5

DAMAGE TO TRUCK NO. 2

OTHER PROP.	1
NO DAMAGE	2
MINOR	3
MODERATE	4
SEVERE	5

INDICATE NORTH BY ARROW

ACCIDENT DESCRIPTION

Unit #2 stated that unit #1 slowly crossed over center-line. Unit #2 veered over to right side of road. Unit #1 hit unit #2 head-on

7#12 Unit #1 crossed over center-line

PROPERTY DAMAGE-OTHER THAN VEHICLES N/A | OWNER/ADDRESS N/A | EMS NOTIFIED TIME 0838 | EMS ARRIVED TIME 0844 | EMS TIME AT HOSPITAL 0917

1ST AID GIVEN BY: Ambulance | INJURED OR DECEASED REMOVED BY: Ambulance | REMOVED TO Hospital

TEST: YES ☐ NO ☒ | OPER. #1 ☐ OPER. #2 ☐ | PED. ☐ OTHER ☐ | TYPE CHEM. TEST BREATH ☐ BLOOD ☐ URINE ☐ | TESTED FOR DRUG ALCOHOL N/A | TAKEN BY N/A | SENT TO | RESULTS N/A

DRIVERS/WITNESSES/PASSENGERS	ADDRESS	IF DECEASED - DATE/TIME	33	32	31	30	29	28	27	26	25
		1/94 1146	1	1	1	M	22	1	3/4	1	1
			1	2	7	F	28	1	1	1	2

ENFORCEMENT ACTION ☐ #1 ☐ #2 | CITATION OR CASE NO N/A | KRS NUMBER: N/A | OFFENSE N/A | PHOTOS: ☒ YES ☐ NO | PHOTOGRAPHER | UNIT NO. 20

INVESTIGATOR | I.D. NO. | BEAT OR POST NO. | TIME NOTIFIED 0833 | TIME ARRIVED 0840 | SCENE CLEARED 0939 | REVIEWED BY: | PAGE OF PAGES 1 2

1 TRAFFIC RECORDS COPY (WITHIN TEN DAYS) KSP 74 REV. 1/87

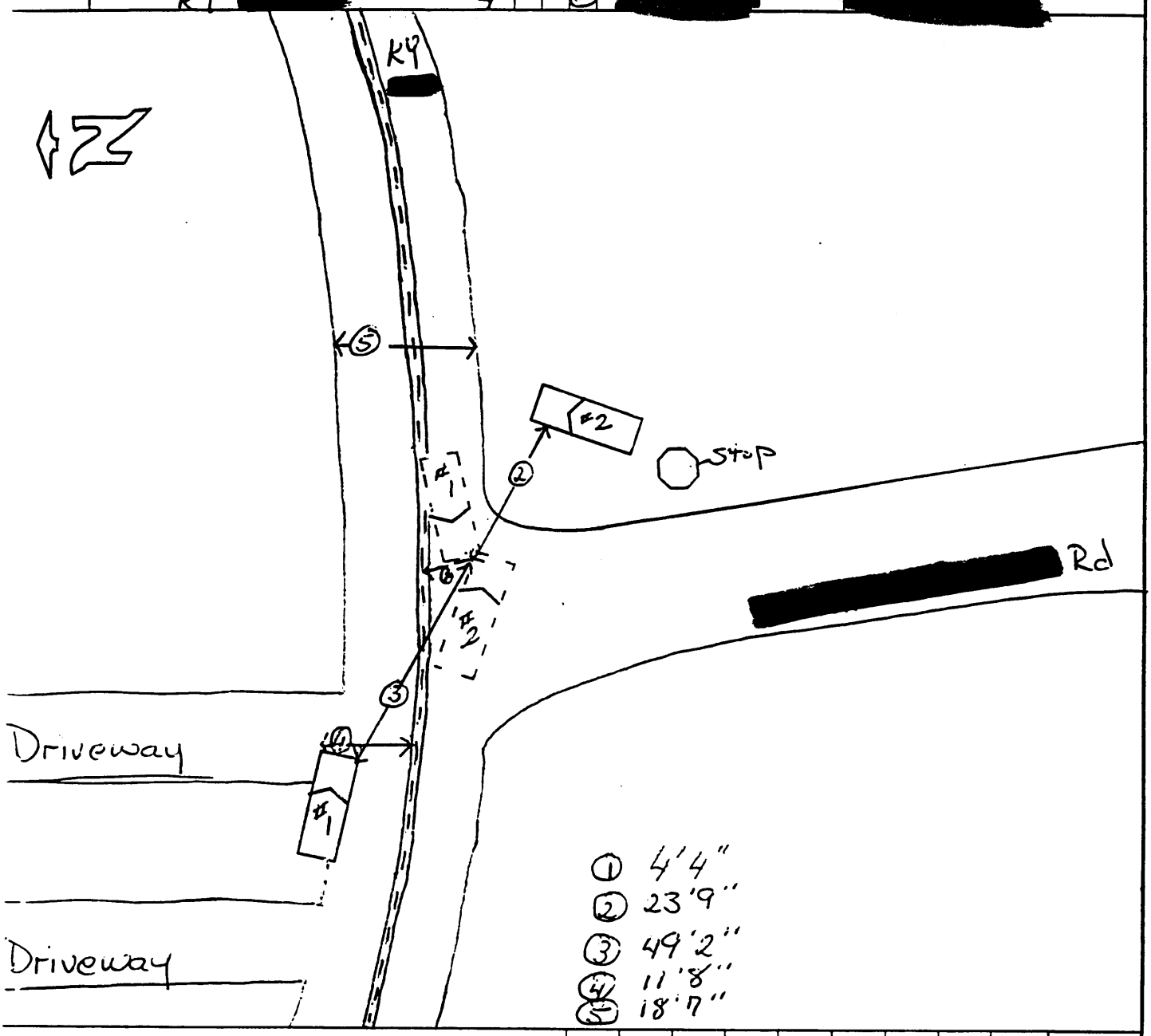
BEST AVAILABLE COPY

UNIFORM POLICE TRAFFIC ACCIDENT REPORT SUPPLEMENTARY

LOCAL CODE	AGENCY I.D. NO.	MASTER FILE NO.
94-039	[redacted]	

INVESTIGATING AGENCY	KILLED	INJURED	INVESTIGATION COMPLETE / INCOMPLETE	H. & R.	CITY	TIME	MO	DAY	YEAR
[redacted] Co. Sheriff	1	1	☒ / ☐	No	[redacted]	0830	05	[redacted]	94

TRAFFICWAY NO. OR NAME	MILES	N / S	E / W	OF	TOWN	COUNTY
KY [redacted]	4		E	OF	[redacted]	[redacted]



DRIVERS/WITNESSES/PASSENGERS	ADDRESS	# OF DECEASED - DATE/TIME	33	32	31	30	29	28	27	26	25
[redacted]		es/12/94 1146	1	1	1	M	22	1	3-4	1	1
[redacted]			1	2	7	F	28	1	1	1	2

ENFORCEMENT ACTION	CITATION OR CASE NO.:	KRS NUMBER:	OFFENSE	PHOTOS: ☒ YES ☐ NO / PHOTOGRAPHER UNIT NO.
☐ #1 ☐ #2	N/A	N/A	N/A	20

INVESTIGATOR:	I.D. NO.	BEAT OR POST NO.	TIME NOTIFIED	TIME ARRIVED	SCENE CLEARED	REVIEWED BY:	PAGE OF PAGES
[redacted]			0853	0840	0939		2 | 2

1 TRAFFIC RECORDS COPY (WITHIN TEN DAYS)

Appendix B:

CRASHPC Program Results

U.S. Department of Transportation
National Highway Traffic Safety Administration

CRASHPC PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Identifying Title			
10	9409	01	[redacted] 94
Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	Date (Month, day, year) of Run

CRASHPC Vehicle Identification

	Year	Make	Model	NASS Ven. No.
Vehicle 1	91'	Chevrolet	CORSICA LT	1
Vehicle 2	88'	Chevrolet	C-1500 P/U	2

GENERAL INFORMATION

	VEHICLE 1	VEHICLE 2
Size	3	5
Weight	1196 + 77 + 0 = 1273 kg (Curb + Occupant(s) + Cargo)	1680 + 61 + ____ = 1741 kg (Curb + Occupant(s) + Cargo)
CDC	12FLAE7	12FYEW5
PDOF (-180 to +180)	Ø 05 °	Ø 10 °
Stiffness	9	8

SCENE INFORMATION

Rest and Impact Positions [ ] No, *Go To Damage Information* [✓] Yes

		VEHICLE 1	VEHICLE 2
Rest Position	X	15.2 m	-9.9 m
	Y	5.5 m	-4.2 m
	PSI	184 °	98 °
Impact Position	X	-.6 m	4.1 m
	Y	2.5 m	1.4 m
	PSI	359 °	189 °
Slip Angle (-180 to +180)		___ °	___ °

VEHICLE MOTION

Sustained Contact [X] No [ ] Yes

		VEHICLE 1	VEHICLE 2
Vehicle Rotation		[ ] No [X] Yes	[ ] No [X] Yes
Rotation Stop Before Rest		[X] No [ ] Yes	[X] No [ ] Yes
End of Rotation Position	X	____.___ m	____.___ m
	Y	____.___ m	____.___ m
	PSI	___ °	___ °
Curved Path		[X] No [ ] Yes	[X] No [ ] Yes
Point on Path	X	____.___ m	____.___ m
	Y	____.___ m	____.___ m
Rotation Direction		[ ] None [ ] CW [X] CCW	[ ] None [ ] CW [X] CCW
Rotation >360°		[X] No [ ] Yes	[X] No [ ] Yes

National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

FRICTION INFORMATION

Coefficient of Friction .80

Rolling Resistance Option

Vehicle 1 Rolling Resistance

LF 1.00 RF .51

LR .51 RR .51

Vehicle 2 Rolling Resistance

LF 1.00 RF .85

LR .90 RR .90

TRAJECTORY INFORMATION

Trajectory Data [ ] No [X] Yes

If No, Go To Damage Information

Vehicle 1 Steer Angles

LF 0° RF 5°

LR 0° RR 0°

Vehicle 2 Steer Angles

LF -65° RF -5°

LR 0° RR 0°

Terrain Boundary [ ] No [X] Yes

First Point

X ____.__ m Y ____.__ m

Second Point

X ____.__ m Y ____.__ m

Secondary Coefficient of Friction .___

DAMAGE INFORMATION

	VEHICLE 1		VEHICLE 2	
Damage Length	L	132 cm	L	170 cm
Crush Depths	C_1	121 cm	C_1	81 cm
	C_2	32 cm	C_2	33 cm
	C_3	22 cm	C_3	18 cm
	C_4	14 cm	C_4	3 cm
	C_5	4 cm	C_5	0 cm
	C_6	1 cm	C_6	0 cm
Damage Offset	D ±	46 cm	D ±	57 cm

IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE *NOT IN TRANSPORT,* FILL IN THE INFORMATION BELOW.

Model Year: _____

Make: _____

Model: _____

VIN: _____

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

WARNING
SEPARATION VELOCITIES ALONG PDOF ARE NOT COMPATIBLE ACCORDING
TO ASSUMPTION OF A COMMON VELOCITY AT THE DAMAGE AREA CENTROIDS.

SUMMARY OF CRASHPC RESULTS USING DAMAGE

P10-9409

	SPEED CHANGE (DAMAGE)	SPEED CHANGE (LINEAR MOMENTUM AND SPINOUT)	IMPACT SPEED (LINEAR MOMENTUM AND SPINOUT)
VEHICLE #1			
TOTAL	35 KPH (22 MPH)	34 KPH (21 MPH)	81 KPH (50 MPH)
LONGITUDINAL	-35 KPH (-22 MPH)	-33 KPH (-20 MPH)	81 KPH (50 MPH)
LATITUDINAL	0 KPH (0 MPH)	10 KPH (6 MPH)	0 KPH (0 MPH)
PDOF ANGLE	-1 DEGREES	-17 DEGREES	
ENERGY DISSIPATED =	60168 JOULES (44372 FT-LB)		
VEHICLE #2			
TOTAL	26 KPH (16 MPH)	25 KPH (15 MPH)	72 KPH (45 MPH)
LONGITUDINAL	-25 KPH (-16 MPH)	-22 KPH (-14 MPH)	72 KPH (45 MPH)
LATITUDINAL	5 KPH (3 MPH)	11 KPH (7 MPH)	0 KPH (0 MPH)
PDOF ANGLE	-11 DEGREES	-27 DEGREES	
ENERGY DISSIPATED =	71886 JOULES (53013 FT-LB)		

SUMMARY OF CRASHPC RESULTS USING TRAJECTORY

P10-9409

	SPEED CHANGE (DAMAGE)	SPEED CHANGE (LINEAR MOMENTUM AND TRAJECTORY)	IMPACT SPEED (LINEAR MOMENTUM AND TRAJECTORY)
VEHICLE #1			
TOTAL	35 KPH (22 MPH)	32 KPH (20 MPH)	81 KPH (50 MPH)
LONGITUDINAL	-35 KPH (-22 MPH)	-29 KPH (-18 MPH)	81 KPH (50 MPH)
LATITUDINAL	0 KPH (0 MPH)	13 KPH (8 MPH)	0 KPH (0 MPH)
PDOF ANGLE	-1 DEGREES	-23 DEGREES	
ENERGY DISSIPATED =	60168 JOULES (44372 FT-LB)		
VEHICLE #2			
TOTAL	26 KPH (16 MPH)	23 KPH (14 MPH)	73 KPH (45 MPH)
LONGITUDINAL	-25 KPH (-16 MPH)	-19 KPH (-12 MPH)	73 KPH (45 MPH)
LATITUDINAL	5 KPH (3 MPH)	13 KPH (8 MPH)	0 KPH (0 MPH)
PDOF ANGLE	-11 DEGREES	-33 DEGREES	
ENERGY DISSIPATED =	71886 JOULES (53013 FT-LB)		

SCENE INFO

	VEHICLE #1	VEHICLE #2
IMPACT X-POSITION	-.6 M. (-2.0 FT.)	4.1 M. (13.4 FT.)
IMPACT Y-POSITION	2.5 M. (8.2 FT.)	1.4 M. (4.6 FT.)
IMPACT HEADING ANGLE	359 DEGREES	189 DEGREES
REST X-POSITION	15.2 M. (49.9 FT.)	-9.9 M. (-32.5 FT.)
REST Y-POSITION	5.5 M. (18.0 FT.)	-4.2 M. (-13.8 FT.)
REST HEADING ANGLE	184 DEGREES	98 DEGREES
SIDE-SLIP ANGLE	0 DEGREES	0 DEGREES
DIRECTION OF ROTATION	CCW	CCW
AMOUNT OF ROTATION	<360	<360

COLLISION AND SEPARATION

	VEHICLE #1	VEHICLE #2
COLLISION		
IMPACT X-POSITION	-.6 M. (-2.0 FT.)	4.1 M. (13.4 FT.)
IMPACT Y-POSITION	2.5 M. (8.2 FT.)	1.4 M. (4.6 FT.)
IMPACT HEADING ANGLE	359 DEGREES	189 DEGREES
SEPARATION (USING SPINOUT)		
US	48 KPH (30 MPH)	50 KPH (31 MPH)
VS	10 KPH (6 MPH)	11 KPH (7 MPH)
PSISD	-119 DEG/SEC	-69 DEG/SEC
RELATIVE VELOCITY (LINEAR MOMENTUM)		
SPEED ALONG LINE THROUGH CG	79 KPH (49 MPH)	67 KPH (42 MPH)
SPEED ORTHOGONAL TO CG LINE	17 KPH (11 MPH)	27 KPH (17 MPH)

CLOSING VELOCITY (LINEAR MOMENTUM) = 146 KPH (91 MPH)

TRAJECTORY SIMULATION RESULTS

SIMULATION TIME = 3.000 SECONDS INTEGRATION STEP = .050 SECONDS

		VEHICLE #1	VEHICLE #2
NUMBER OF ITERATIONS		19	8
BEST ITERATION		19	8
ERROR		.004	.004
PREDICTED REST POSITION	X	15.2 M. (49.9 FT.)	-9.8 M. (-32.2 FT.)
	Y	5.5 M. (18.1 FT.)	-4.2 M. (-13.7 FT.)
	ANGLE	185 DEGREES	95 DEGREES
SCENE REST POSITION	X	15.2 M. (49.9 FT.)	-9.9 M. (-32.5 FT.)
	Y	5.5 M. (18.0 FT.)	-4.2 M. (-13.8 FT.)
	ANGLE	184 DEGREES	98 DEGREES
RESIDUAL LINEAR VELOCITY		0 KPH (0 MPH)	0 KPH (0 MPH)
RESIDUAL ANGULAR VELOCITY		1.40 DEG/SEC	-1.89 DEG/SEC

DAMAGE DATA

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	3	5
STIFFNESS CATEGORY	9	8
VEHICLE WEIGHT	1273 KGS (2806 LBS)	1741 KGS (3838 LBS)
CDC	12FLAE7	12FYEW5
PDOF ANGLE	-1 DEGREES	-11 DEGREES
CRUSH LENGTH	132 CM. (52 IN.)	170 CM. (67 IN.)
C1	121 CM. (48 IN.)	81 CM. (32 IN.)
C2	32 CM. (13 IN.)	33 CM. (13 IN.)
C3	22 CM. (9 IN.)	18 CM. (7 IN.)
C4	14 CM. (6 IN.)	3 CM. (1 IN.)
C5	4 CM. (2 IN.)	0 CM. (0 IN.)
C6	1 CM. (0 IN.)	0 CM. (0 IN.)
D	-46 CM. (-18 IN.)	-57 CM. (-22 IN.)
D'	-81 CM. (-32 IN.)	-109 CM. (-43 IN.)

(* INDICATES DEFAULT VALUE)

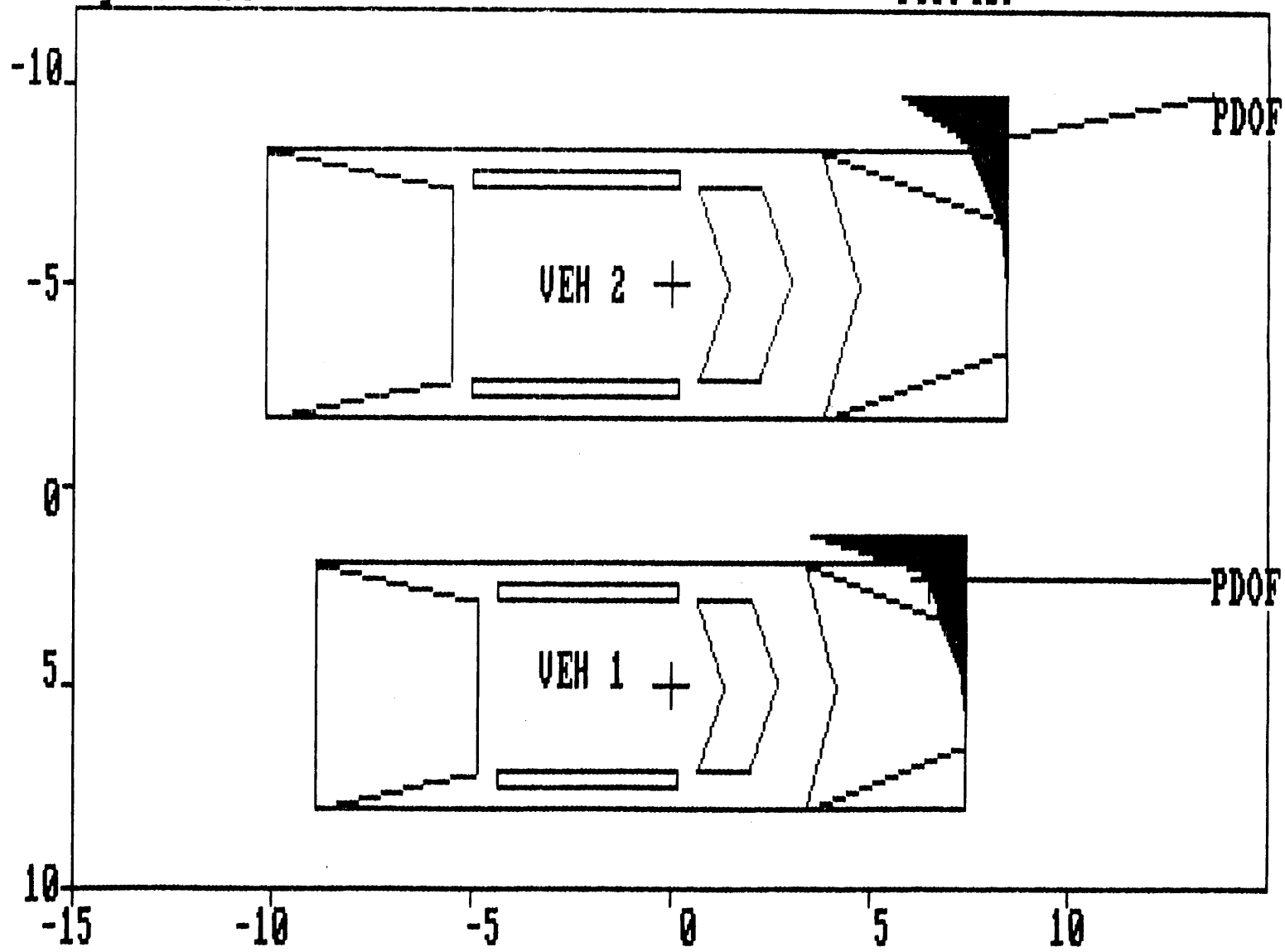
DIMENSIONS AND INERTIAL PROPERTIES

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	130 CM. (51 IN.)	142 CM. (56 IN.)
CG TO REAR AXLE	141 CM. (56 IN.)	160 CM. (63 IN.)
TRACK	150 CM. (59 IN.)	162 CM. (64 IN.)
CG TO FRONT OF VEH	228 CM. (90 IN.)	259 CM. (102 IN.)
CG TO REAR OF VEH	-270 CM. (-106 IN.)	-310 CM. (-122 IN.)
CG TO SIDE OF VEH	92 CM. (36 IN.)	101 CM. (40 IN.)
MOMENT OF INERTIA	11001 KGS (24252 LBS)	18287 KGS (40316 LBS)
VEHICLE MASS	3 KGS (7 LBS)	5 KGS (10 LBS)
ROLLING RESISTANCE		
LEFT FRONT WHEEL	1.00	1.00
RIGHT FRONT WHEEL	.51	.85
LEFT REAR WHEEL	.51	.90
RIGHT REAR WHEEL	.51	.90

COEFFICIENT OF FRICTION = .80

Printing Picture:

SCI9409



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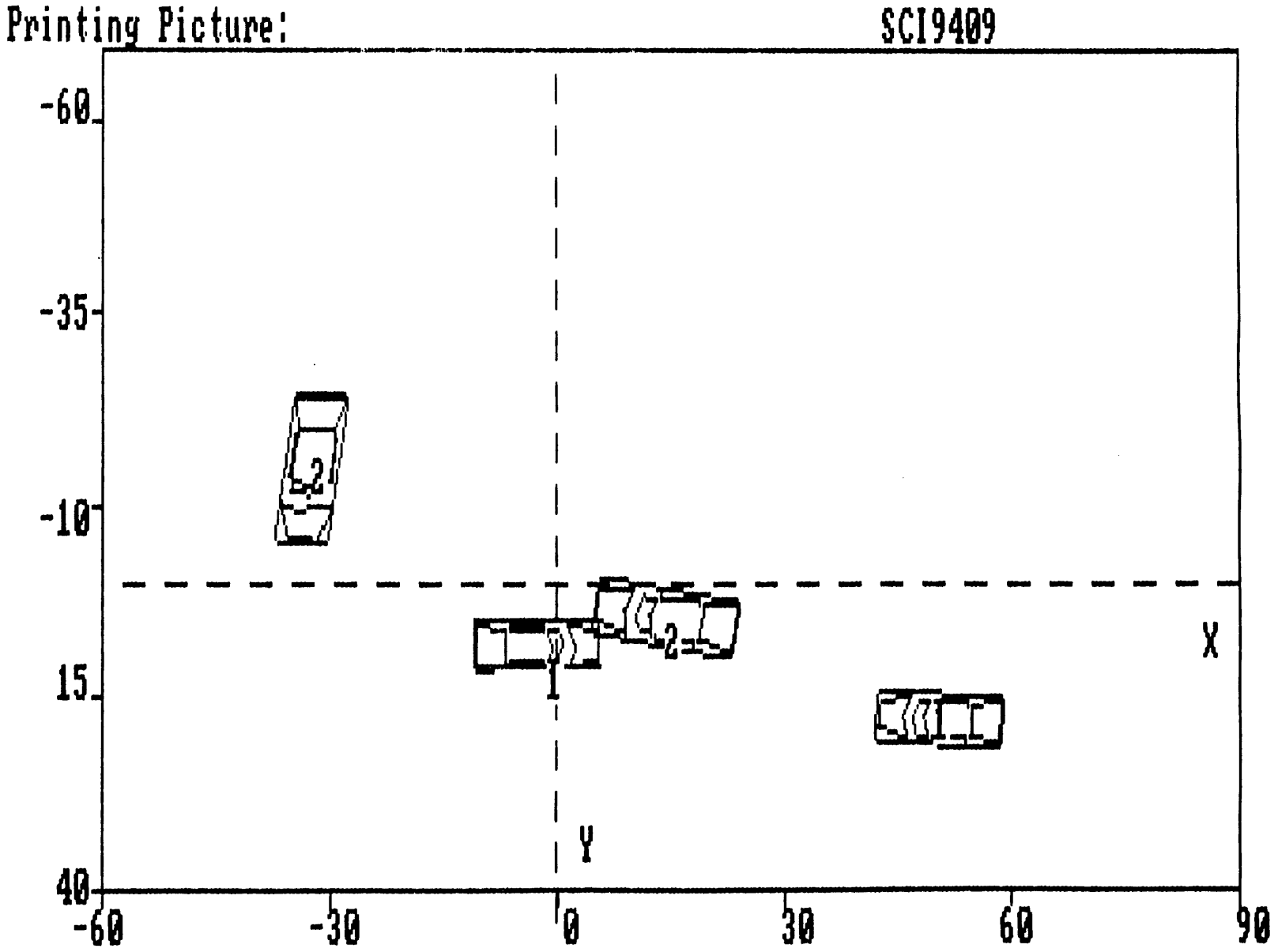
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30
60
90
X
Y
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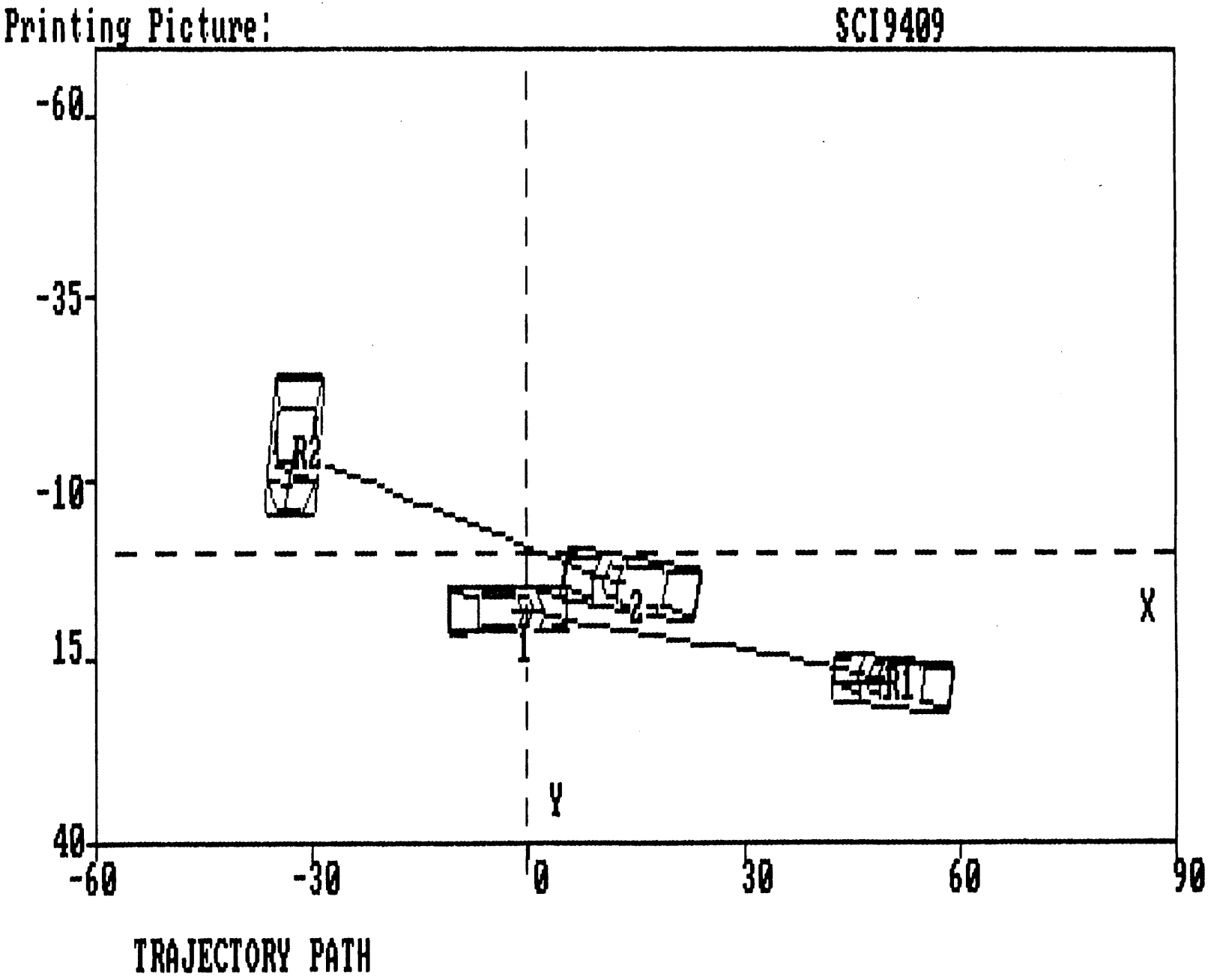
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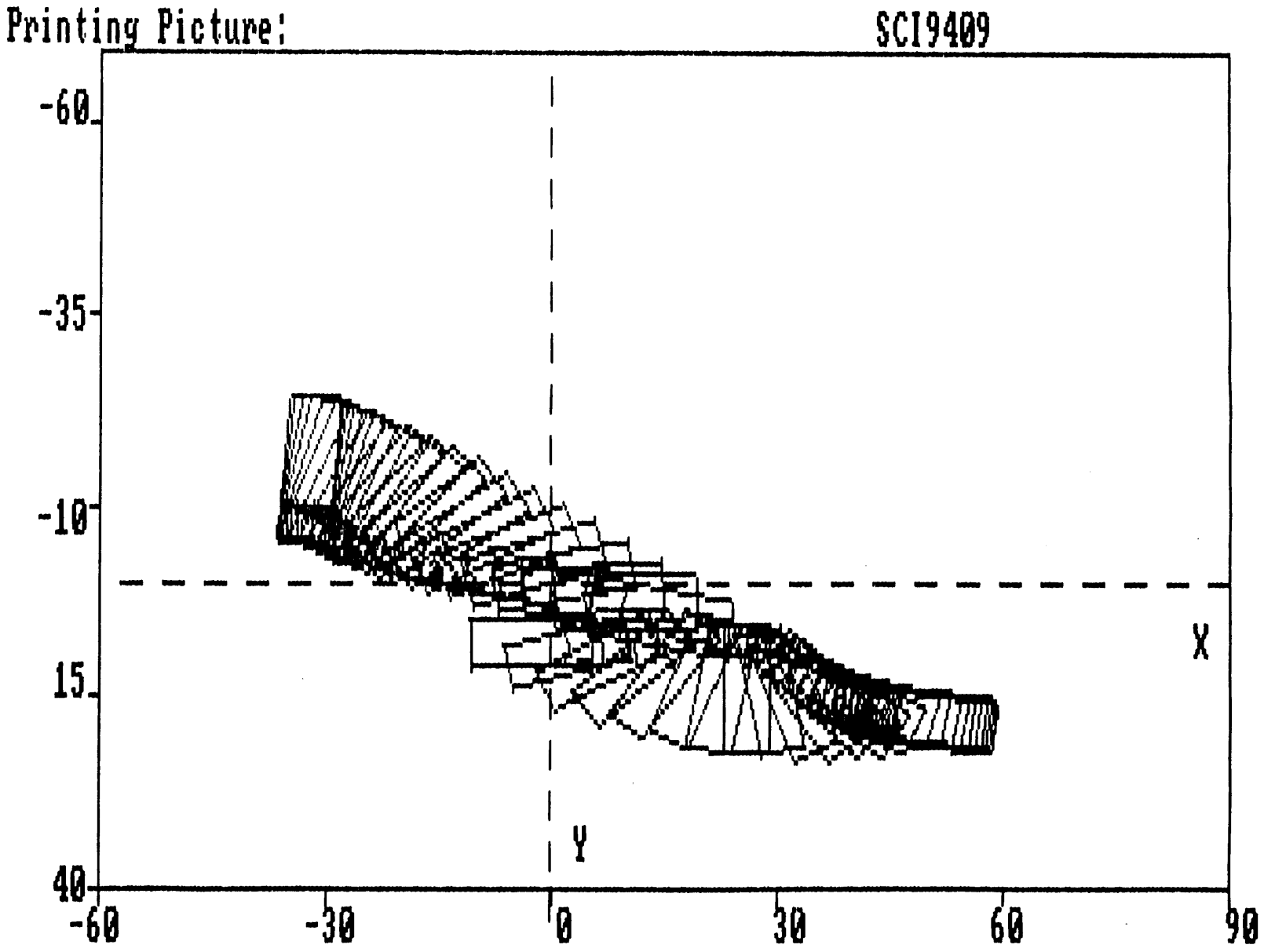
15
40
-60
-30
0
30
60
90
R2
R1
X
Y
TRAJECTORY PATH



VEHICLE TRAJECTORY: UNINTERRUPTED

Appendix C:

NASS CDS Accident Form

U.S. Department of Transportation
National Highway Traffic Safety Administration

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409

IDENTIFICATION

3. Number of General Vehicle Forms Submitted: 02
4. Date of Accident (Month,Day,Year): [redacted] 94
5. Time of Accident: [redacted]

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. ___SS15 Administrative Use: 0
7. ___SS16 Pedestrian Crash Data Study: 0
8. ___SS17 Impact Fires: 0
9. ___SS18 _____: 0
10. ___SS19 _____: 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident: 01

Code the number of events which occurred in this accident.

ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. 01	13. 01	14. 02	15. F	16. 02	17. 15	18. F
19. 02	20.	21.	22.	23.	24.	25.
26. 03	27.	28.	29.	30.	31.	32.
33. 04	34.	35.	36.	37.	38.	39.
40. 05	41.	42.	43.	44.	45.	46.

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

CODES FOR CLASS OF VEHICLE

(00) Not a motor vehicle
(01) Subcompact/mini (wheelbase < 254 cm)
(02) Compact (wheelbase ≥ 254 but < 265 cm)
(03) Intermediate (wheelbase ≥ 265 but < 278 cm)
(04) Full size (wheelbase ≥ 278 but < 291 cm)
(05) Largest (wheelbase ≥ 291 cm)
(09) Unknown passenger car size
(11) Compact utility vehicle
(12) Large utility vehicle (≤ 4,500 kgs GVWR)
(13) Passenger van (≤ 4,500 kgs GVWR)
(14) Other van (≤ 4,500 kgs GVWR)
(15) Pickup truck (≤ 4,500 kgs GVWR)
(18) Other truck (≤ 4,500 kgs GVWR)
(19) Unknown light truck type
(20) School bus
(21) Other bus
(22) Truck (> 4,500 kgs GVWR)
(23) Tractor without trailer
(24) Tractor-trailer(s)
(25) Motored cycle
(28) Other vehicle
(99) Unknown

CODES FOR GENERAL AREA OF DAMAGE (GAD)

CDS APPLICABLE AND OTHER VEHICLES

(0) Not a motor vehicle
(N) Noncollision
(F) Front
(R) Right side
(L) Left side
(B) Back
(T) Top
(U) Undercarriage
(9) Unknown

TDC APPLICABLE VEHICLES

(0) Not a motor vehicle
(N) Noncollision
(F) Front
(R) Right side
(L) Left side
(B) Back of unit with cargo area (rear of trailer or straight truck)
(D) Back (rear of tractor)
(C) Rear of cab
(V) Front of cargo area
(T) Top
(U) Undercarriage
(9) Unknown

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
(31) Overturn — rollover
(32) Fire or explosion
(33) Jackknife
(34) Other intraunit damage (specify): _____
(35) Noncollision injury
(38) Other noncollision (specify): _____
(39) Noncollision — details unknown

Collision With Fixed Object
(41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment
(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
(50) Pole or post (≤ 10 cm in diameter)
(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
(52) Pole or post (> 30 cm in diameter)
(53) Pole or post (diameter unknown)
(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail) (specify): _____
(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify): _____
(69) Unknown fixed object

Collision with Nonfixed Object
(71) Motor vehicle not in-transport
(72) Pedestrian
(73) Cyclist or cycle
(74) Other nonmotorist or conveyance _____
(75) Vehicle occupant
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify): _____
(89) Unknown nonfixed object

(98) Other event (specify): _____
(99) Unknown event or object

Appendix D:

NASS CDS Vehicle Forms: Case Vehicle

U.S. Department of Transportation
National Highway Traffic Safety Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 1 D
2. Case Number - Stratum: 9 4 0 9
3. Vehicle Number: 0 1

VEHICLE IDENTIFICATION

4. Vehicle Model Year: 9 1
   Code the last two digits of the model year
   (99) Unknown

5. Vehicle Make (specify): 2 0
   Chevrolet
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (99) Unknown

6. Vehicle Model (specify): 0 1 9
   CORSICA LT
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (999) Unknown

7. Body Type: 0 4
   Note: Applicable codes may be found on the back of this page.

8. Vehicle Identification Number

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	G	1	L	T	5	3	G	2	M	Y						

   Left justify; Slash zeros and letter Z (Ø and Z)
   No VIN—Code all zeros
   Unknown—Code all nines

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition: 1
   (0) Not towed due to vehicle damage
   (1) Towed due to vehicle damage
   (9) Unknown

10. Police Reported Travel Speed: 9 9 9
    Code to the nearest kph (NOTE: 000 means less than 0.5 kph)
    (160) 159.5 kph and above
    (999) Unknown

    ___ mph X 1.6093 = ___ kph

11. Police Reported Alcohol Presence: Ø
    (0) No alcohol present
    (1) Yes (alcohol present)
    (7) Not reported
    (8) No driver present
    (9) Unknown

    Note: See variables 37 through 55 (Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver: 0 0
    Code actual value (decimal implied before first digit—0.xx)
    (95) Test refused
    (96) None given
    (97) AC test performed, results unknown
    (98) No driver present
    (99) Unknown

    Source: Autopsy

ACCIDENT RELATED

13. Speed Limit: 0 8 6
    (000) No statutory limit
    Code posted or statutory speed limit in kph
    (999) Unknown

    55 mph X 1.6093 = 86 kph

14. Attempted Avoidance Maneuver: 9 9
    (01) No avoidance actions
    (02) Braking (no lockup)
    (03) Braking (lockup)
    (04) Braking (lockup unknown)
    (05) Releasing brakes
    (06) Steering left
    (07) Steering right
    (08) Braking and steering left
    (09) Braking and steering right
    (10) Accelerating
    (11) Accelerating and steering left
    (12) Accelerating and steering right
    (97) No driver present
    (98) Other action (specify): _____
    (99) Unknown

15. Accident Type: 5 0
    Applicable codes may be found on the back of page two of this field form
    (00) No impact
    Code the number of the diagram that best describes the accident circumstance
    (98) Other accident type (specify): _____
    (99) Unknown

****** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ******

OCCUPANT RELATED

16. Driver Presence in Vehicle: 1
    (0) Driver not present
    (1) Driver present
    (9) Unknown

17. Number of Occupants This Vehicle: 01
    (00-96) Code actual number of occupants for this vehicle
    (97) 97 or more
    (99) Unknown

18. Number of Occupant Forms Submitted: 01

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight: 1.200
    ____Code weight to nearest 10 kilograms.
    (045) Less than 450 kilograms
    (610) 6,100 kilograms or more
    (999) Unknown

    ____ lbs X .4536 = 1.196 kgs
    Source: Auto NEWS 91'

20. Vehicle Cargo Weight: 0000
    ____Code weight to nearest 10 kilograms. PER VEHICLE INSPECTION
    (000) Less than 5 kilograms
    (450) 4,500 kilograms or more
    (999) Unknown

    ____ lbs X .4536 = ____ kgs

RECONSTRUCTION DATA

21. Towed Trailing Unit: 0
    (0) No towed unit
    (1) Yes—towed trailing unit
    (9) Unknown

22. Documentation of Trajectory Data for This Vehicle: 1
    (0) No
    (1) Yes

23. Post Collision Condition of Tree or Pole (For Highest Delta V): 0
    (0) Not collision (for highest delta V) with tree or pole
    (1) Not damaged
    (2) Cracked/sheared
    (3) Tilted <45 degrees
    (4) Tilted ≥45 degrees
    (5) Uprooted tree
    (6) Separated pole from base
    (7) Pole replaced
    (8) Other (specify): _____
    (9) Unknown

24. Rollover: 0
    (0) No rollover (no overturning)

    Rollover (primarily about the longitudinal axis)
    (1) Rollover, 1 quarter turn only
    (2) Rollover, 2 quarter turns
    (3) Rollover, 3 quarter turns
    (4) Rollover, 4 or more quarter turns (specify): _____

    (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
    (9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle): 0

26. Rear Override/Underride (this Vehicle): 0

    (0) No override/underride, or not an end-to-end impact

    Override (see specific CDC)
    (1) 1st CDC
    (2) 2nd CDC
    (3) Other not automated CDC (specify): _____

    Underride (see specific CDC)
    (4) 1st CDC
    (5) 2nd CDC
    (6) Other not automated CDC (specify): _____

    (7) Medium/heavy truck or bus override
    (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(997) Noncollision
(998) Impact with object
(999) Unknown

27. Heading Angle For This Vehicle: 259

28. Heading Angle For Other Vehicle: 082

29. Basis for Total Delta V (highest) 1

Delta V Calculated
(1) CRASH program—damage only routine
(2) CRASH program—damage and trajectory routine
(3) Missing vehicle algorithm

Delta V Not Calculated
(4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
(5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
(6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V — Highest 035

35 Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: 000 means less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of Delta V ± 035

-35 Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: _000 means greater than −0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(_999) Unknown

Highest

32. Lateral Component of Delta V ± 000

0 Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: _000 means greater than −0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(_999) Unknown

33. Energy Absorption 060.200

60168 Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

34. Confidence In Reconstruction Program Results (For Highest Delta V) 3
(0) No reconstruction
(1) Collision fits model — results appear reasonable
(2) Collision fits model — results appear high
(3) Collision fits model — results appear low
(4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection 1
(0) No inspection
(1) Complete inspection
(2) Partial inspection (specify):
_____

36. Is this an AOPS Vehicle? 1
(0) No
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [ ] YES [√] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

37. Police Reported Other Drug Presence 0
(0) No other drug(s) present
(1) Yes [other drug(s) present]
(7) Not reported
(8) No driver present
(9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 0
(0) No DEC process available or given
(1) DEC process given, results known
(2) DEC process given, results unknown
(3) DEC process available, unknown if given
(8) No driver present

39. Other Drug Specimen Test Type For Driver 1
(0) No specimen test given
(1) Blood test } Both
(2) Urine test }
(3) Other specimen tests (specify): _____
(7) Unspecified specimen test
(8) No driver present
(9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION
OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results	
Narcotic Drug	40. 0	41. 1	U
Depressant Drug	42. 0	43. 1	B+U
Stimulant Drug	44. 0	45. 1	U
Hallucinogen Drug	46. 0	47. 7	
Cannabinoid Drug	48. 0	49. 1	U
Phencyclidine (PCP)	50. 0	51. 1	U
Inhalant Drug	52. 0	53. 0	
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. 0	55. 1	B

Codes For DEC Test Results

(0) No DEC test given
(1) Passed DEC test
(2) Failed DEC test
(3) DEC test given—results unknown
(8) No driver present
(9) Unknown if DEC test given

Codes for Specimen Test Results

(0) No specimen test given
(1) Drug not found in specimen
(2) Drug found in specimen
(7) Specimen test given, results unknown or not obtained
(8) No driver present
(9) Unknown if specimen test given

OTHER DATA

56. Driver's Zip Code [redacted]

(00000) Driver not present
(00001) Driver not a resident of U.S. or territories
_____ Code actual 5-digit zip code
(99999) Unknown

57. Driver's Race/Ethnic Origin 1
(0) Driver not present
(1) White (non-Hispanic)
(2) Black (non-Hispanic)
(3) White (Hispanic)
(4) Black (Hispanic)
(5) American Indian, Eskimo or Aleut
(6) Asian or Pacific Islander
(8) Other (specify):
_____
(9) Unknown

58. Vehicle Special Use (This Trip) 0
(0) No special use
(1) Taxi
(2) Vehicle used as school bus
(3) Vehicle used as other bus
(4) Military
(5) Police
(6) Ambulance
(7) Fire truck or car
(8) Other (specify): _____
(9) Unknown

ROLLOVER DATA

If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank.
If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type 0
(0) No rollover
(1) Trip-over
(2) Flip-over
(3) Turn-over
(4) Climb-over
(5) Fall-over
(6) Bounce-over
(7) Collision with another vehicle
(8) Other rollover initiation type specify):
_____
(9) Unknown rollover initiation type

60. Location of Rollover Initiation 0
(0) No rollover
(1) On roadway
(2) On shoulder—paved
(3) On shoulder—unpaved
(4) On roadside or divided trafficway median
(9) Unknown

61. Rollover Initiation Object Contacted 00

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify):
_____
(8) Non-contact rollover forces (specify):
_____
(9) Unknown

63. Direction of Initial Roll 0
(0) No rollover
(1) Roll right - primarily about the longitudinal axis
(2) Roll left - primarily about the longitudinal axis
(5) End-over-end (i.e., primarily about the lateral axis)
(9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event) 13
(01) Going straight
(02) Slowing or stopping in traffic lane
(03) Starting in traffic lane
(04) Stopped in traffic lane
(05) Passing or overtaking another vehicle
(06) Disabled or parked in travel lane
(07) Leaving a parking position
(08) Entering a parking position
(09) Turning right
(10) Turning left
(11) Making a U-turn
(12) Backing up (other than for parking position)
(13) Negotiating a curve
(14) Changing lanes
(15) Merging
(16) Successful avoidance maneuver to a previous critical event
(97) Other (specify):
_____
(98) No driver present
(99) Unknown

PRECRASH DATA (Continued)

65. Critical Precrash Event 10

This Vehicle Loss of Control Due To:
(01) Blow out or flat tire
(02) Stalled engine
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
(06) Traveling too fast for conditions
(08) Other cause of control loss (specify): _____
(09) Unknown cause of control loss

This Vehicle Traveling
(10) Over the lane line on left side of travel lane
(11) Over the lane line on right side of travel lane
(12) Off the edge of the road on the left side
(13) Off the edge of the road on the right side
(14) End departure
(15) Turning left at intersection
(16) Turning right at intersection
(17) Crossing over (passing through) intersection
(19) Unknown travel direction

Other Motor Vehicle In Lane
(50) Stopped
(51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
(52) Traveling in same direction with higher speed
(53) Traveling in opposite direction
(54) In crossover
(55) Backing
(59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane
(60) From adjacent lane (same direction)—over left lane line
(61) From adjacent lane (same direction)—over right lane line
(62) From opposite direction—over left lane line
(63) From opposite direction—over right lane line
(64) From parking lane
(65) From crossing street, turning into same direction
(66) From crossing street, across path
(67) From crossing street, turning into opposite direction
(68) From crossing street, intended path not known
(70) From driveway, turning into same direction
(71) From driveway, across path
(72) From driveway, turning into opposite direction
(73) From driveway, intended path not known
(74) From entrance to limited access highway
(78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist
(80) Pedestrian in roadway
(81) Pedestrian approaching roadway
(82) Pedestrian—unknown location
(83) Pedalcyclist or other nonmotorist in roadway (specify): _____
(84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
(85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal
(87) Animal in roadway
(88) Animal approaching roadway
(89) Animal—unknown location
(90) Object in roadway
(91) Object approaching roadway
(92) Object—unknown location

(98) Other critical precrash event (specify): _____
(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attemped Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver 9
(0) No avoidance maneuver
(1) Tracking
(2) Skidding longitudinally—rotation less than 30 degrees
(3) Skidding laterally—clockwise rotation
(4) Skidding laterally—counterclockwise rotation
(7) Other vehicle loss-of-control (specify): _____
(8) No driver present
(9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 9
(0) No avoidance maneuver
(1) Vehicle stayed in travel lane where avoidance maneuver was initiated
(2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
(3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
(4) Vehicle departed roadway
(5) Avoidance maneuver initiated off roadway
(8) No driver present
(9) Directional consequences unknown

***** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), *****
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

***** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE *****
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 01

VEHICLE IDENTIFICATION

VIN: 1G1LT53G2MY_____ Model Year: 91

Vehicle Make (specify): Chevrolet

Vehicle Model (specify): Corsica

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	(L) BC OVER 40 CM's	

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
1	FRONT Bumper	40CM	21B DOWN SIDE	120	121	32	22	14	4	1	-46

HS Form 435A (Rev. 1/94)

ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	103.4	inches	x 2.54	=	263	cm
Overall Length	183.4	inches	x 2.54	=	466	cm
Maximum Width	68.2	inches	x 2.54	=	173	cm
Curb Weight	2,638	pounds	x .4536	=	1,196	kg
Average Track	55.4	inches	x 2.54	=	141	cm
Front Overhang	___	inches	x 2.54	=	96	cm
Rear Overhang	___	inches	x 2.54	=	104	cm
Undeformed End Width	52.	inches	x 2.54	=	132	cm
Engine Size: cyl./displ.	____	cc	x .001	=	2.2	L
	___	CID	x .0164	=	___	L

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	2	2
LF	1	1
RR	2	2
LR	2	2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

ORIGINAL SPECIFICATIONS

Wheelbase	263	cm
Overall Length	466	cm
Maximum Width	173	cm
Curb Weight	1196	kg
Average Track	141	cm
Front Overhang	96	cm
Rear Overhang	164	cm
Undeformed End Width	132	cm
Engine Size: cyl./displ.		L

WHEEL STEER ANGLES

(For locked front wheels or displaced rear axles only)

RF ± ___ ___ o
LF ± ___ ___ o
RR ± ___ ___ o
LR ± ___ ___ o

Within ± 5 degrees

DRIVE WHEELS

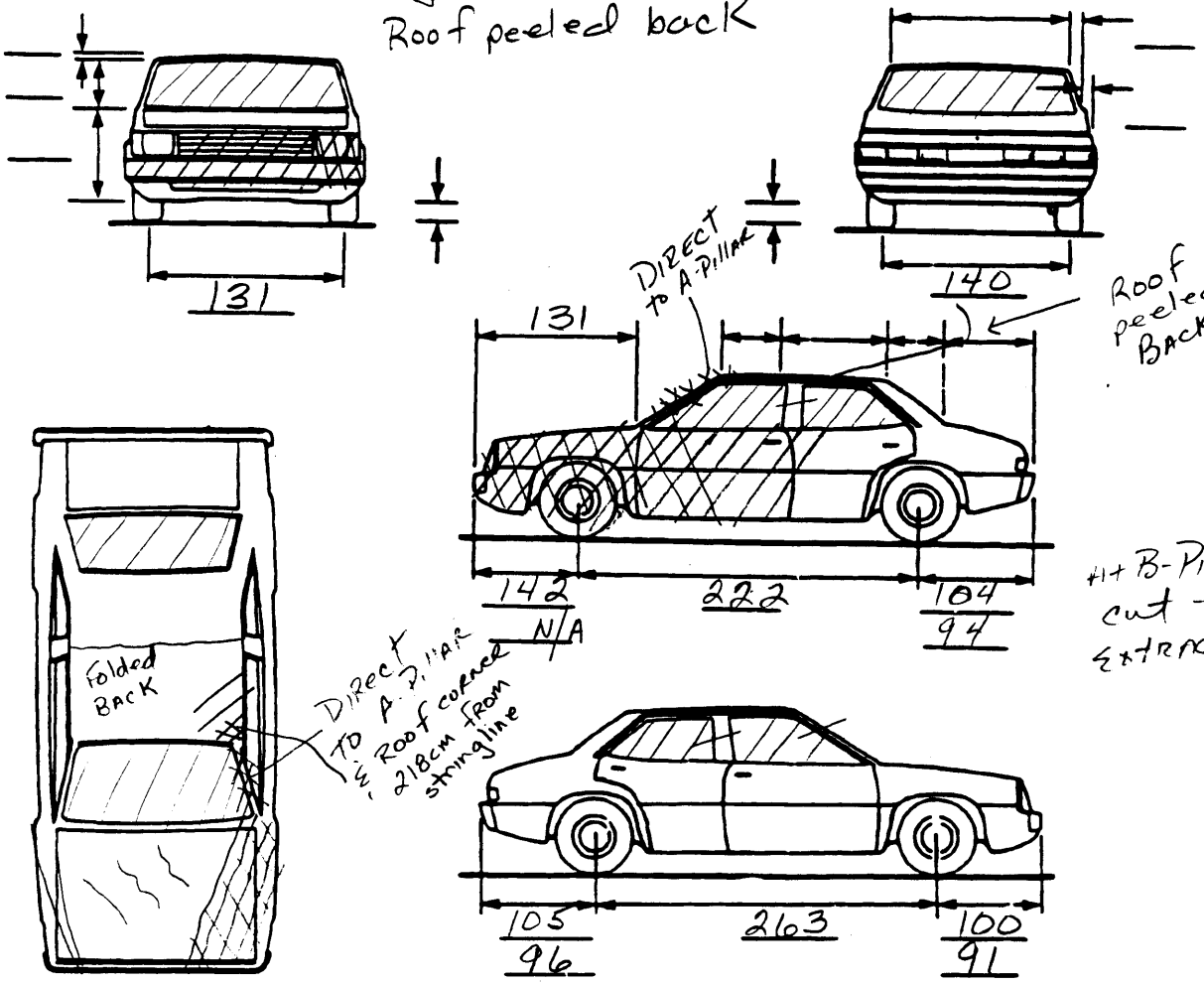
☐ FWD ☐ RWD ☐ 4WD

Approximate Cargo Weight 0 kg

All windows out

MEASUREMENTS IN CENTIMETERS

MAJOR Extraction DAMAGE
Roof peeled back



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): _____
- (35) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision — details unknown

Collision With Fixed Object
- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision with Nonfixed Object
- (71) Motor vehicle not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance _____
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object
- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02	10		F	L	E	E	06

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. 01	5. 02	6. 12	7. F	8. L	9. A	10. E	11. 07

Second Highest Delta "V"

12.	13.	14.	15.	16.	17.	18.	19.

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C_1	C_2	C_3	C_4	C_5	C_6	22. ±D
132	121	032	022	014	004	001	+0046

Second Highest Delta "V"

23. L	24. C_1	C_2	C_3	C_4	C_5	C_6	25. ±D
							+ −

26. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

28. Original Wheelbase 263
Code to the nearest centimeter
(999) Unknown

____.__ inches X 2.54 = ____ centimeters

29. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
    (0) No post manufacturer modifications
    (1) Yes - post manufacturer modifications (specify): _____
    _____
    _____
    (Include photograph of CERTIFICATION PLACARD in case report)
    (9) Unknown if vehicle is modified

30. Fire Occurrence 0
    (0) No fire

    Yes, fire occurred
    (1) Minor
    (2) Major
    (9) Unknown

31. Origin of Fire 0
    (0) No fire
    (1) Vehicle exterior (front, side, back, top)
    (2) Exhaust system
    (3) Fuel tank (and other fuel retention system parts)
    (4) Engine compartment
    (5) Cargo/trunk compartment
    (6) Instrument panel
    (7) Passenger compartment area
    (8) Other location (specify):
    _____
    (9) Unknown

32. Type of Fuel Tank-1 2

33. Type of Fuel Tank-2 0
    (0) No fuel tank (electrical vehicle)
    (1) Metallic
    (2) Non-metallic
    (9) Unknown

34. Fuel Tank-1 Location 4

35. Fuel Tank-2 Location 0
    (0) No fuel tank
    (1) Aft of center of the rear wheels (rear axle) centered
    (2) Aft of center of the rear wheels (rear axle) left side
    (3) Aft of center of the rear wheels (rear axle) right side
    (4) Forward of center of the rear wheels (rear axle) centered
    (5) Forward of center of the rear wheels (rear axle) left side
    (6) Forward of center of the rear wheels (rear axle) right side
    (7) Over center of the rear wheels (rear axle)
    (8) Other (specify):
    _____
    (9) Unknown

36. Fuel Tank-1 Filler Cap Location 3

37. Fuel Tank-2 Filler Cap Location 0
    (0) No fuel tank
    (1) On back plane
    (2) Aft of center of the rear wheels (rear axle) on left side plane
    (3) Aft of center of the rear wheels (rear axle) on right side plane
    (4) Forward of center of the rear wheels (rear axle) on left side plane
    (5) Forward of center of the rear wheels (rear axle) on right side plane
    (6) Over the center of the rear wheels (rear axle) on left side plane
    (7) Over the center of the rear wheels (rear axle) on right side plane
    (8) Other (specify): _____
    (9) Unknown

38. Fuel Tank-1 Damage 1

39. Fuel Tank-2 Damage 0
    (0) No fuel tank
    (1) No damage to fuel tank
    (2) Deformed, no seam failure
    (3) Deformed, with a seam failure
    (4) Punctured
    (5) Lacerated (ripped)
    (6) Abraded (scraped)
    (7) Filler neck separation from the fuel tank
    (8) Other damage (specify):
    _____
    (9) Unknown

40. Location of Fuel System-1 Leakage 1

41. Location of Fuel System-2 Leakage 0
(0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage
(2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify): _____
(9) Unknown

42. Fuel Type-1 01

43. Fuel Type-2 00

Single Fuel Type
(00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify): _____

Electric Powered or Electric/Solar Powered Vehicles
(10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify): _____

(98) Other Hybrid (specify): _____

(99) Unknown fuel type

44. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0
(0) No (one or two tanks only)

Yes - More Than Two Tanks
(1) Yes -- no damage to any tank or filler cap and no fuel system leakage
(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): _____
(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____
(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS *** (I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 01

INTEGRITY

4. Passenger Compartment Integrity: 12

(00) No integrity loss

Yes, Integrity Was Lost Through
(01) Windshield
(02) Door (side)
(03) Door/hatch (back door)
(04) Roof
(05) Roof glass
(06) Side window
(07) Rear window (backlight)
(08) Roof and roof glass
(09) Windshield and door (side)
(10) Windshield and roof
(11) Side and rear window (side window and backlight)
(12) Windshield and side window
(13) Door and side window
(98) Other combination of above (specify): _____
(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 1 7. LR 9 8. RR 1 9. TG/H 0

(0) No door/gate/hatch
(1) Door/gate/hatch remained closed and operational
(2) Door/gate/hatch came open during collision
(3) Door/gate/hatch jammed shut
(8) Other (specify): _____
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision
(1) Door operational (no damage)
(2) Latch/striker failure due to damage
(3) Hinge failure due to damage
(4) Door structure failure due to damage
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
(6) Latch/striker and hinge failure due to damage
(8) Other failure (specify): _____
(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 9 16. LF 6 17. RF 0 18. LR 9 19. RR 0
20. BL 0 21. Roof 8 22. Other 0

(0) No glazing damage from impact forces
(2) Glazing in place and cracked from impact forces
(3) Glazing in place and holed from impact forces
(4) Glazing out-of-place (cracked or not) and not holed from impact forces
(5) Glazing out-of-place and holed from impact forces
(6) Glazing disintegrated from impact forces
(7) Glazing removed prior to accident
(8) No glazing
(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 9 24. LF 0 25. RF 0 26. LR 0 27. RR 0
28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing
(1) Glazing contacted by occupant but no glazing damage
(2) Glazing in place and cracked by occupant contact
(3) Glazing in place and holed by occupant contact
(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(5) Glazing out-of-place by occupant contact and holed by occupant contact
(6) Glazing disintegrated by occupant contact
(9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As Ø

Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 0 34. LR 2 35. RR 0
36. BL 0 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing
(1) AS-1 — Laminated
(2) AS-2 — Tempered
(3) AS-3 — Tempered-tinted
(4) AS-14 — Glass/Plastic
(8) Other (specify): _____
(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 9 41. RF 0 42. LR 9 43. RR 0
44. BL 0 45. Roof 0 46. Other 0

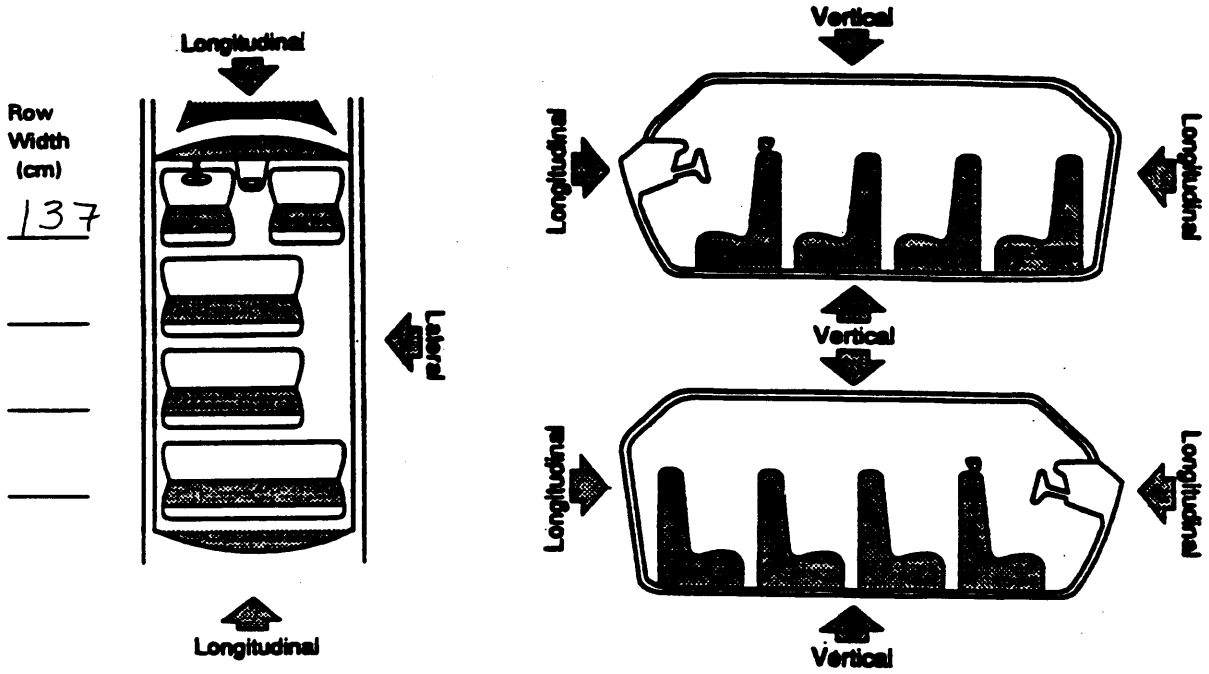
(0) No glazing contact and no damage, or no glazing
(1) Fixed
(2) Closed
(3) Partially opened
(4) Fully opened
(9) Unknown

1G1LT53G2MY

86

INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters) COMPARISON VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
11	DASH	143	–	126	=	17	LONG
11	FLOOR PAN	23	–	8	=	15	LONG
11	HOOD	185	–	148	=	37	LONG
12	HOOD	12	–	4	=	8	LONG
11	A-PILLAR		–	UNK	=		LONG
11	ROOF		–	UNK	=		VERT
11	SIDE PANEL	33	–	24	=	9	LAT
11	TOE PAN	51	–	45	=	6	LONG
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. 11	48. 30	49. 4	50. 2
2nd	51. 11	52. 02	53. 3	54. 2
3rd	55. 11	56. 17	57. 3	58. 2
4th	59. 11	60. 27	61. 2	62. 3
5th	63. 12	64. 30	65. 2	66. 2
6th	67. 11	68. 05	69. 1	70. 2
7th	71. 99	72. 99	73. 9	74. 9
8th	75. ___	76. ___	77. ___	78. ___
9th	79. ___	80. ___	81. ___	82. ___
10th	83. ___	84. ___	85. ___	86. ___

LOCATION OF INTRUSION

Front Seat
- (11) Left
- (12) Middle
- (13) Right

Second Seat
- (21) Left
- (22) Middle
- (23) Right

Third Seat
- (31) Left
- (32) Middle
- (33) Right

Fourth Seat
- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____
- (99) Unknown

INTRUDING COMPONENT

Interior Components
- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____
- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

Exterior Components
- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION
- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION
- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	–	DAMAGE VALUE	=	DEFORMATION
	–		=	
	–		=	
	–		=	
	–		=	

STEERING COLUMN

87. Steering Column Type 2
(1) Fixed column
(2) Tilt column
(3) Telescoping column
(4) Tilt and telescoping column
(8) Other column type (specify): _____
(9) Unknown

88. Blank X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

89. Blank X X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

90. Blank X X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

91. Blank X X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

92. Steering Rim/Spoke Deformation 0 0
_____Code actual measured deformation to the nearest centimeter
(00) No steering rim deformation
(01-14) Actual measured value in centimeters
(15) 15 centimeters or more
(98) Observed deformation cannot be measured
(99) Unknown

93. Location of Steering Rim/Spoke Deformation 0 0
(00) No steering rim deformation

Quarter Sections
(01) Section A
(02) Section B
(03) Section C
(04) Section D

Half Sections
(05) Upper half of rim/spoke
(06) Lower half of rim/spoke
(07) Left half of rim/spoke
(08) Right half of rim/spoke

(09) Complete steering wheel collapse
(10) Undetermined location
(99) Unknown

INSTRUMENT PANEL

94. Odometer Reading 0 7 3 ,000
_____kilometers—Code to the nearest 1,000 kilometers
(000) No odometer
(001) Less than 1,500 kilometers
(500) 499,500 kilometers or more
(999) Unknown

45448 miles X 1.6093 = 73139 kilometers

Source: ODometer

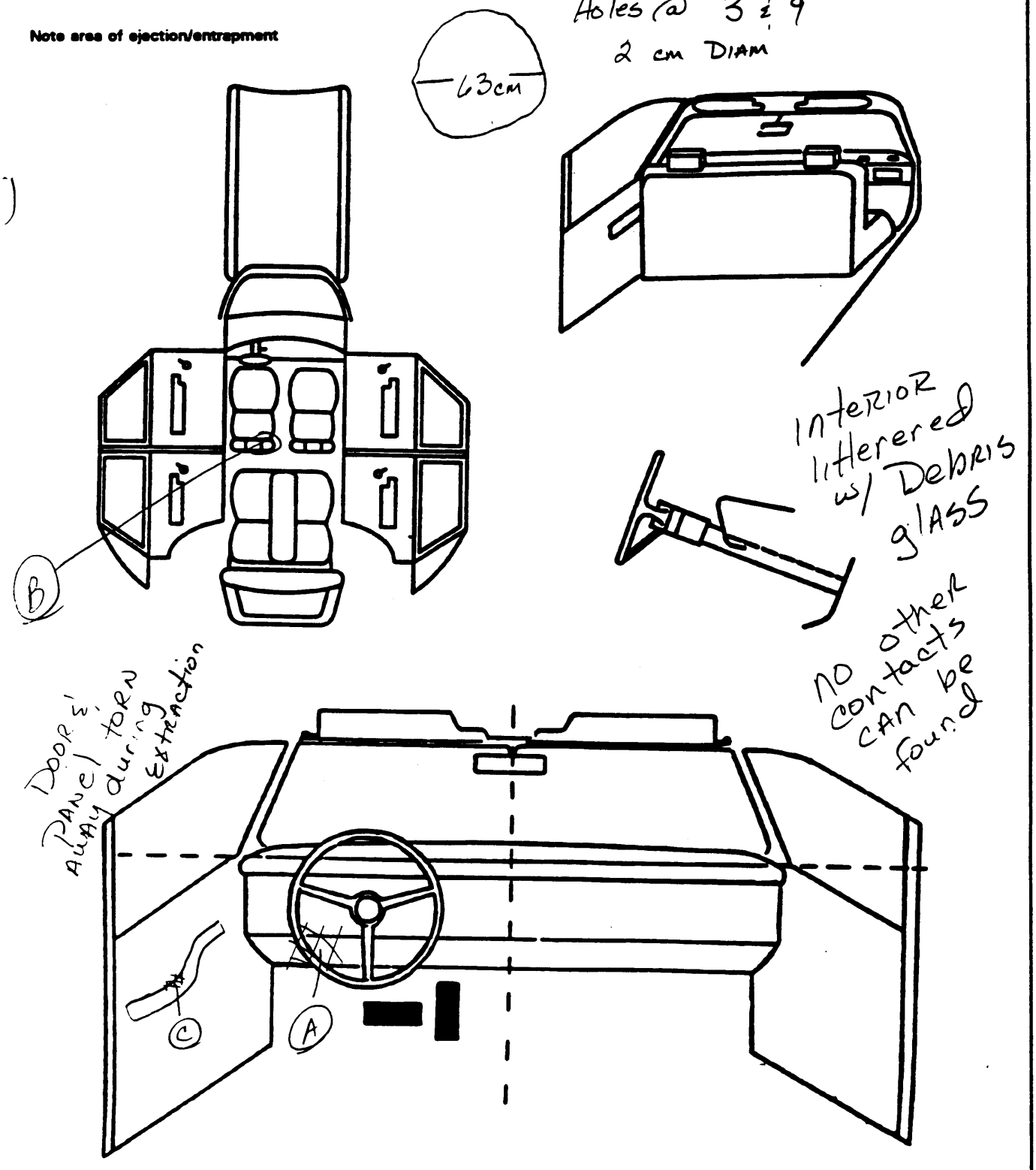
95. Instrument Panel Damage from Occupant Contact? 1
(0) No
(1) Yes
(9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 1
(0) No
(1) Yes
(8) Not present
(9) Unknown

97. Did Glove Compartment Door Open During Collision(s)? 0
(0) No
(1) Yes
(8) Not present
(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure.
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	09	DRIVER	(L) Knee	pushed in CRACKED	1
B	44	"	HEAD	Deformed	2
C	20	"	(L) TORSO	scuff possible cloth TRANS	2
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT
- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify):_____
- (19) Other front object (specify):

LEFT SIDE
- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify):
- (28) Left side window sill

RIGHT SIDE
- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill

INTERIOR
- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):_____
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify):
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

ROOF
- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR
- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR
- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

CONFIDENCE LEVEL OF CONTACT POINT
- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
FIRST	Availability/Function	1	0
	Deployment	1	0
	Failure	1	0

Air Bag System Availability/Function
- (0) Not equipped/not available
- (1) Air bag

Non-functional
- (2) Air bag disconnected (specify): _____
- (3) Air bag not reinstalled
- (9) Unknown

Air Bag System Deployment
- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

Are There Indications of Air Bag System Failure?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (9) Unknown

AUTOMATIC BELTS

		Left	Right
FIRST	Availability/Function		
	Use		
	Type		
	Proper Use		
	Failure Modes		

Automatic (Passive) Belt System Availability/Function
- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional
- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

Automatic (Passive) Belt System Use
- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative)
- (3) Automatic belt use unknown
- (9) Unknown

Automatic (Passive) Belt System Type
- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

Proper Use of Automatic (Passive) Belt System
- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

Automatic (Passive) Belt Failure Modes During Accident
- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Ocupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	0	4
	Evidence of usage	04	00	04
	Used in this crash?	04	0	00
	Proper Use	9	1	0
	Failure Modes	1	0	0
SECOND	Availability	04	3	04
	Evidence of usage	00	00	00
	Used in this crash?	0	0	0
	Proper Use	0	0	0
	Failure Modes	0	0	0
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

Manual (Active) Belt System Availability
- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed
- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____
- (9) Unknown

Manual (Active) Belt System Use
- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): _____
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

Proper Use of Manual (Active) Belts
- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly
- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of manual belt system (specify): _____
- (9) Unknown

Manual (Active) Belt Failure Modes During Accident
- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

   (0) No child safety seat
   (1) Infant seat
   (2) Toddler seat
   (3) Convertible seat
   (4) Booster seat
   (7) Other type child safety seat (specify):

   _____
   (8) Unknown child safety seat type
   (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

   (00) No child safety seat

   Designed for Rear Facing for This Age/Weight
   (01) Rear facing
   (02) Forward facing
   (08) Other orientation (specify):

   _____
   (09) Unknown orientation

   Designed for Forward Facing for This Age/Weight
   (11) Rear facing
   (12) Forward facing
   (18) Other orientation (specify):

   _____
   (19) Unknown orientation

   Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
   (21) Rear facing
   (22) Forward facing
   (28) Other orientation (specify):

   _____
   (29) Unknown orientation

   (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage
   Note: Options Below Are Used for Variables 3-5.

   (00) No child safety seat

   Not Designed with Harness/Shield/Tether
   (01) After market harness/shield/tether added, not used
   (02) After market harness/shield/tether used
   (03) Child safety seat used, but no after market harness/shield/tether added
   (09) Unknown if harness/shield/tether added or used

   Designed With Harness/Shield/Tether
   (11) Harness/shield/tether not used
   (12) Harness/shield/tether used
   (19) Unknown if harness/shield/tether used

   Unknown If Designed With Harness/Shield/Tether
   (21) Harness/shield/tether not used
   (22) Harness/shield/tether used
   (29) Unknown if harness/shield/tether used

   (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
   (Specify make/model and occupant number)

   _____
   _____
   _____
   _____

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	4	0	3
	Seat Type	02		02
	Seat Performance	1		1
	Seat Orientation	1		1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

(0) No head restraints
(1) Integral — no damage
(2) Integral — damaged during accident
(3) Adjustable — no damage
(4) Adjustable — damaged during accident
(5) Add-on — no damage
(6) Add-on — damaged during accident
(8) Other Specify): _____
(9) Unknown

Seat Type (this Occupant Position)

(00) Occupant not seated or no seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., column supported)
(09) Other seat type (specify): _____
(10) Box mounted seat (i.e., van type)
(99) Unknown

Seat Performance (this Occupant Position)

(0) Occupant not seated or no seat
(1) No seat performance failure(s)
(2) Seat adjusters failed
(3) Seat back folding locks or "seat back" failed specify: _____
(4) Seat tracks/anchors failed
(5) Deformed by impact of occupant
(6) Deformed by passenger compartment intrusion (specify): _____
(7) Combination of above (specify): _____
(8) Other (specify): _____
(9) Unknown

Seat Orientation (this Occupant Position)

(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify): _____
(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [X] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): _____
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [ ] Yes [✓]

Describe entrapment mechanism: MASSIVE intrusion through the frontal plane causing the Left DASHBOARD And steering ASSEMBLY to pin the driver against the seAt back so hArd that the seatback was pushed backword into backseat space.

Component(s): Left DASHBOARD & steering ASSEMBLY

(Note in vehicle interior diagram)

Appendix E:

NASS CDS VEHICLE FORMS: VEHICLE #2

U.S. Department of Transportation
National Highway Traffic Safety Administration

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 02

VEHICLE IDENTIFICATION

4. Vehicle Model Year: 88
   Code the last two digits of the model year
   (99) Unknown

5. Vehicle Make (specify): Chevrolet — 20
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (99) Unknown

6. Vehicle Model (specify): Cheyenne C-1500 — 481
   Applicable codes are found in your NASS Data Collection, Coding and Editing Manual.
   (999) Unknown

7. Body Type: 31
   Note: Applicable codes may be found on the back of this page.

8. Vehicle Identification Number: 1GCDC14ZXJZ_____

   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

   Left justify; Slash zeros and letter Z (0 and Z)
   No VIN—Code all zeros
   Unknown—Code all nines

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition: 1
   (0) Not towed due to vehicle damage
   (1) Towed due to vehicle damage
   (9) Unknown

10. Police Reported Travel Speed: 050
    Code to the nearest kph (NOTE: 000 means less than 0.5 kph)
    (160) 159.5 kph and above
    (999) Unknown

    ___ mph X 1.6093 = ___ kph

11. Police Reported Alcohol Presence: 0
    (0) No alcohol present
    (1) Yes (alcohol present)
    (7) Not reported
    (8) No driver present
    (9) Unknown

    Note: See variables 37 through 55 (Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver: 96
    Code actual value (decimal implied before first digit—0.xx)
    (95) Test refused
    (96) None given
    (97) AC test performed, results unknown
    (98) No driver present
    (99) Unknown

    Source: PAR

ACCIDENT RELATED

13. Speed Limit: 086
    (000) No statutory limit
    Code posted or statutory speed limit in kph
    (999) Unknown

    55 mph X 1.6093 = 86 kph

14. Attempted Avoidance Maneuver: 09
    (01) No avoidance actions
    (02) Braking (no lockup)
    (03) Braking (lockup)
    (04) Braking (lockup unknown)
    (05) Releasing brakes
    (06) Steering left
    (07) Steering right
    (08) Braking and steering left
    (09) Braking and steering right
    (10) Accelerating
    (11) Accelerating and steering left
    (12) Accelerating and steering right
    (97) No driver present
    (98) Other action (specify): _____
    (99) Unknown

15. Accident Type: 51
    Applicable codes may be found on the back of page two of this field form
    (00) No impact
    Code the number of the diagram that best describes the accident circumstance
    (98) Other accident type (specify): _____
    (99) Unknown

****** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ******

OCCUPANT RELATED

16. Driver Presence in Vehicle — 1
    (0) Driver not present
    (1) Driver present
    (9) Unknown

17. Number of Occupants This Vehicle — 01
    (00-96) Code actual number of occupants for this vehicle
    (97) 97 or more
    (99) Unknown

18. Number of Occupant Forms Submitted — 01

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight — 1.66 0
    ____Code weight to nearest 10 kilograms.
    (045) Less than 450 kilograms
    (610) 6,100 kilograms or more
    (999) Unknown

    ____.___ lbs X .4536 = 1.658 kgs

    Source: 88' GAS TRUCK INDEX

20. Vehicle Cargo Weight — ___.___ 0
    ____Code weight to nearest 10 kilograms.
    (000) Less than 5 kilograms
    (450) 4,500 kilograms or more
    (999) Unknown

    ___.___ lbs X .4536 = ___.___ kgs

RECONSTRUCTION DATA

21. Towed Trailing Unit — 0
    (0) No towed unit
    (1) Yes—towed trailing unit
    (9) Unknown

22. Documentation of Trajectory Data for This Vehicle — 1
    (0) No
    (1) Yes

23. Post Collision Condition of Tree or Pole (For Highest Delta V) — 0
    (0) Not collision (for highest delta V) with tree or pole
    (1) Not damaged
    (2) Cracked/sheared
    (3) Tilted <45 degrees
    (4) Tilted ≥45 degrees
    (5) Uprooted tree
    (6) Separated pole from base
    (7) Pole replaced
    (8) Other (specify): _____
    (9) Unknown

24. Rollover — 0
    (0) No rollover (no overturning)

    Rollover (primarily about the longitudinal axis)
    (1) Rollover, 1 quarter turn only
    (2) Rollover, 2 quarter turns
    (3) Rollover, 3 quarter turns
    (4) Rollover, 4 or more quarter turns (specify): _____

    (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
    (9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) — 0

26. Rear Override/Underride (this Vehicle) — 0

    (0) No override/underride, or not an end-to-end impact

    Override (see specific CDC)
    (1) 1st CDC
    (2) 2nd CDC
    (3) Other not automated CDC (specify): _____

    Underride (see specific CDC)
    (4) 1st CDC
    (5) 2nd CDC
    (6) Other not automated CDC (specify): _____

    (7) Medium/heavy truck or bus override
    (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
(997) Noncollision
(998) Impact with object
(999) Unknown

27. Heading Angle For This Vehicle — 082

28. Heading Angle For Other Vehicle — 259

29. Basis for Total Delta V (highest) 1

Delta V Calculated
(1) CRASH program—damage only routine
(2) CRASH program—damage and trajectory routine
(3) Missing vehicle algorithm

Delta V Not Calculated
(4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
(5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
(6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

Highest

30. Total Delta V 026

26 Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: 000 means less than 0.5 kph)
(160) 159.5 kph and above
(999) Unknown

31. Longitudinal Component of Delta V ⊖025

−25 Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: _000 means greater than −0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(_999) Unknown

Highest

32. Lateral Component of Delta V ⊖005

+5 Nearest kph (highest)

_____ Nearest kph (secondary)

(NOTE: _000 means greater than −0.5 kph and less than +0.5 kph)
(±160) ±159.5 kph and above
(_999) Unknown

33. Energy Absorption 071.900

71886 Nearest 100 joules (highest)

_____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
(9997) 999,650 joules or more
(9999) Unknown

34. Confidence In Reconstruction Program Results (For Highest Delta V) 3
(0) No reconstruction
(1) Collision fits model — results appear reasonable
(2) Collision fits model — results appear high
(3) Collision fits model — results appear low
(4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection 1
(0) No inspection
(1) Complete inspection
(2) Partial inspection (specify):
_____

36. Is this an AOPS Vehicle? 1
(0) No
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [ ] YES [✓] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

37. Police Reported Other Drug Presence 0
(0) No other drug(s) present
(1) Yes [other drug(s) present]
(7) Not reported
(8) No driver present
(9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 0
(0) No DEC process available or given
(1) DEC process given, results known
(2) DEC process given, results unknown
(3) DEC process available, unknown if given
(8) No driver present

39. Other Drug Specimen Test Type For Driver 0
(0) No specimen test given
(1) Blood test
(2) Urine test
(3) Other specimen tests (specify): _____
(7) Unspecified specimen test
(8) No driver present
(9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION
OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. 0	41. 0
Depressant Drug	42. 0	43. 0
Stimulant Drug	44. 0	45. 0
Hallucinogen Drug	46. 0	47. 0
Cannabinoid Drug	48. 0	49. 0
Phencyclidine (PCP)	50. 0	51. 0
Inhalant Drug	52. 0	53. 0
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. 0	55. 0

Codes For DEC Test Results

(0) No DEC test given
(1) Passed DEC test
(2) Failed DEC test
(3) DEC test given—results unknown
(8) No driver present
(9) Unknown if DEC test given

Codes for Specimen Test Results

(0) No specimen test given
(1) Drug not found in specimen
(2) Drug found in specimen
(7) Specimen test given, results unknown or not obtained
(8) No driver present
(9) Unknown if specimen test given

OTHER DATA

56. Driver's Zip Code [redacted]

(00000) Driver not present
(00001) Driver not a resident of U.S. or territories
_____ Code actual 5-digit zip code
(99999) Unknown

57. Driver's Race/Ethnic Origin 1
(0) Driver not present
(1) White (non-Hispanic)
(2) Black (non-Hispanic)
(3) White (Hispanic)
(4) Black (Hispanic)
(5) American Indian, Eskimo or Aleut
(6) Asian or Pacific Islander
(8) Other (specify): _____
(9) Unknown

58. Vehicle Special Use (This Trip) 0
(0) No special use
(1) Taxi
(2) Vehicle used as school bus
(3) Vehicle used as other bus
(4) Military
(5) Police
(6) Ambulance
(7) Fire truck or car
(8) Other (specify): _____
(9) Unknown

ROLLOVER DATA

If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank.
If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type 0
(0) No rollover
(1) Trip-over
(2) Flip-over
(3) Turn-over
(4) Climb-over
(5) Fall-over
(6) Bounce-over
(7) Collision with another vehicle
(8) Other rollover initiation type specify): _____
(9) Unknown rollover initiation type

60. Location of Rollover Initiation 0
(0) No rollover
(1) On roadway
(2) On shoulder—paved
(3) On shoulder—unpaved
(4) On roadside or divided trafficway median
(9) Unknown

61. Rollover Initiation Object Contacted 00

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify): _____
(8) Non-contact rollover forces (specify): _____
(9) Unknown

63. Direction of Initial Roll 0
(0) No rollover
(1) Roll right - primarily about the longitudinal axis
(2) Roll left - primarily about the longitudinal axis
(5) End-over-end (i.e., primarily about the lateral axis)
(9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event) 13
(01) Going straight
(02) Slowing or stopping in traffic lane
(03) Starting in traffic lane
(04) Stopped in traffic lane
(05) Passing or overtaking another vehicle
(06) Disabled or parked in travel lane
(07) Leaving a parking position
(08) Entering a parking position
(09) Turning right
(10) Turning left
(11) Making a U-turn
(12) Backing up (other than for parking position)
(13) Negotiating a curve
(14) Changing lanes
(15) Merging
(16) Successful avoidance maneuver to a previous critical event
(97) Other (specify): _____
(98) No driver present
(99) Unknown

PRECRASH DATA (Continued)

65. Critical Precrash Event 62

This Vehicle Loss of Control Due To:
(01) Blow out or flat tire
(02) Stalled engine
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
(06) Traveling too fast for conditions
(08) Other cause of control loss (specify): _____
(09) Unknown cause of control loss

This Vehicle Traveling
(10) Over the lane line on left side of travel lane
(11) Over the lane line on right side of travel lane
(12) Off the edge of the road on the left side
(13) Off the edge of the road on the right side
(14) End departure
(15) Turning left at intersection
(16) Turning right at intersection
(17) Crossing over (passing through) intersection
(19) Unknown travel direction

Other Motor Vehicle In Lane
(50) Stopped
(51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
(52) Traveling in same direction with higher speed
(53) Traveling in opposite direction
(54) In crossover
(55) Backing
(59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane
(60) From adjacent lane (same direction)—over left lane line
(61) From adjacent lane (same direction)—over right lane line
(62) From opposite direction—over left lane line
(63) From opposite direction—over right lane line
(64) From parking lane
(65) From crossing street, turning into same direction
(66) From crossing street, across path
(67) From crossing street, turning into opposite direction
(68) From crossing street, intended path not known
(70) From driveway, turning into same direction
(71) From driveway, across path
(72) From driveway, turning into opposite direction
(73) From driveway, intended path not known
(74) From entrance to limited access highway
(78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist
(80) Pedestrian in roadway
(81) Pedestrian approaching roadway
(82) Pedestrian—unknown location
(83) Pedalcyclist or other nonmotorist in roadway (specify): _____
(84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
(85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal
(87) Animal in roadway
(88) Animal approaching roadway
(89) Animal—unknown location
(90) Object in roadway
(91) Object approaching roadway
(92) Object—unknown location

(98) Other critical precrash event (specify): _____
(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attemped Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver 2
(0) No avoidance maneuver
(1) Tracking
(2) Skidding longitudinally—rotation less than 30 degrees
(3) Skidding laterally—clockwise rotation
(4) Skidding laterally—counterclockwise rotation
(7) Other vehicle loss-of-control (specify): _____
(8) No driver present
(9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 1
(0) No avoidance maneuver
(1) Vehicle stayed in travel lane where avoidance maneuver was initiated
(2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
(3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
(4) Vehicle departed roadway
(5) Avoidance maneuver initiated off roadway
(8) No driver present
(9) Directional consequences unknown

***** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35=0), *****
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

***** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE *****
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

U.S. Department of Transportation
National Highway Traffic Safety Administration

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 02

VEHICLE IDENTIFICATION

VIN: 1GCDC14ZXJZ_____ Model Year: 88

Vehicle Make (specify): Chevrolet Vehicle Model (specify): C-1500 Cheyenne

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	(L) BC OVER 66 CM	ACROSS whole front Bumper

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush. 102.5

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
1	Bumper	56 CM	81	130	81	33	18	3	0	0	-57

HS Form 435A (Rev. 1/94)

ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	117.5	inches	x 2.54	=	298	cm
Overall Length	194.1	inches	x 2.54	=	493	cm
Maximum Width	76.4	inches	x 2.54	=	194	cm
Curb Weight	3,655	pounds	x .4536	=	1,658	kg
Average Track	___	inches	x 2.54	=	___	cm
Front Overhang	34.9	inches	x 2.54	=	89	cm
Rear Overhang	46.1	inches	x 2.54	=	117	cm
Undeformed End Width	70.__	inches	x 2.54	=	178	cm
Engine Size: cyl./displ.	____	cc	x .001	=	4.3	L
	___	CID	x .0164	=	__.__	L

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	2	2
LF	1	1
RR	2	2
LR	2	2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☒ Manual ☐ Automatic

ORIGINAL SPECIFICATIONS

Wheelbase	298	cm
Overall Length	493	cm
Maximum Width	194	cm
Curb Weight	1658	kg
Average Track		cm
Front Overhang	89	cm
Rear Overhang	117	cm
Undeformed End Width	170	cm
Engine Size: cyl./displ.	4.3	L

WHEEL STEER ANGLES
(For locked front wheels or displaced rear axles only)

RF ± ___ ___ °
LF ± ___ ___ °
RR ± ___ ___ °
LR ± ___ ___ °

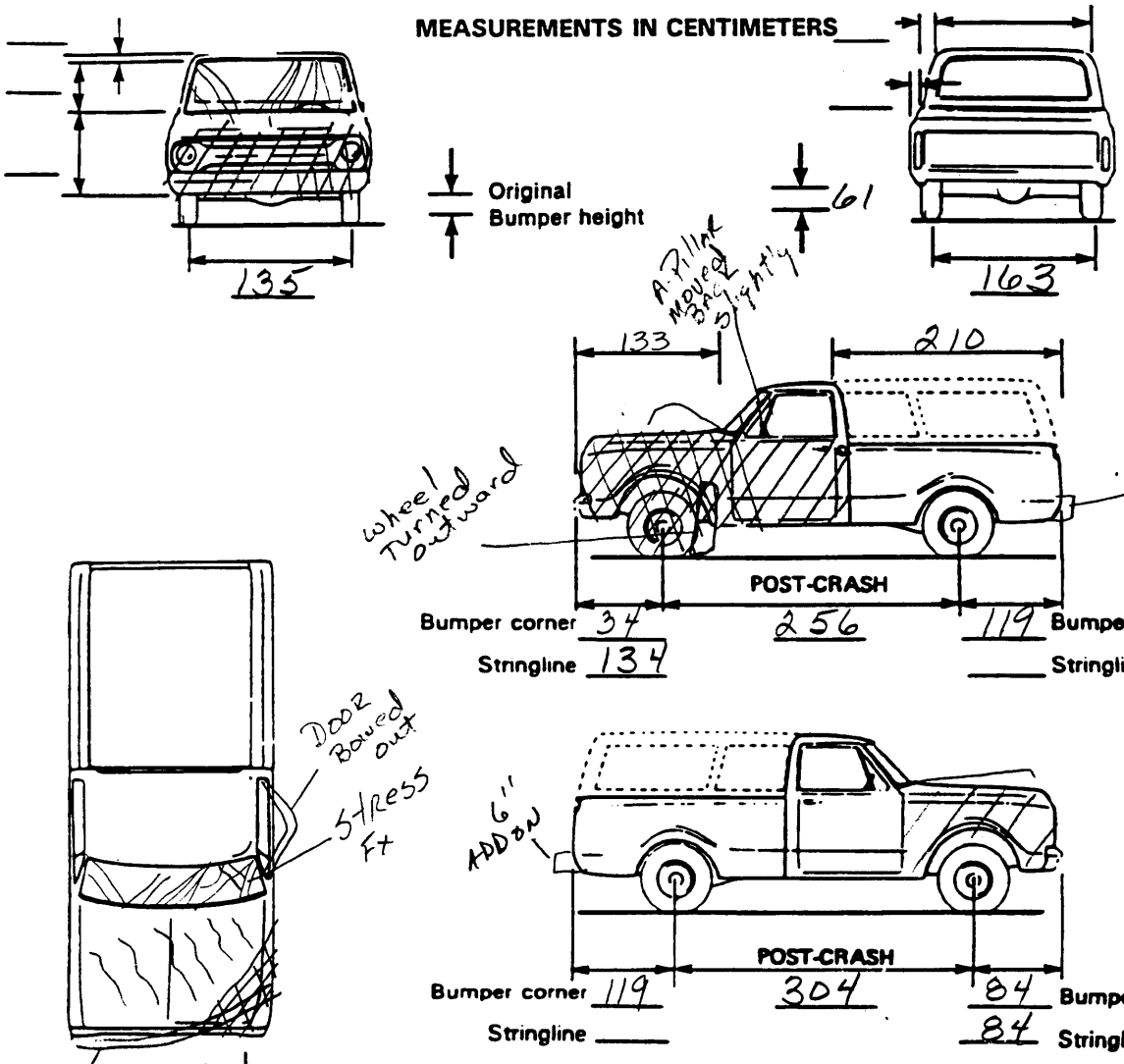
Within ± 5 degrees

DRIVE WHEELS

☐ FWD ☒ RWD ☐ 4WD

Approximate Cargo Weight _____ kg

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): _____
- (35) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision — details unknown

Collision With Fixed Object
- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision with Nonfixed Object
- (71) Motor vehicle not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object
- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	01	-10		F	Y	E	W	05

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. 01	5. 01	6. 12	7. F	8. Y	9. E	10. W	11. 05

Second Highest Delta "V"

12. ___	13. ___	14. ___	15. ___	16. ___	17. ___	18. ___	19. ___

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C_1	C_2	C_3	C_4	C_5	C_6	22. ±D
170	081	033	018	003	000	000	+057

Second Highest Delta "V"

23. L	24. C_1	C_2	C_3	C_4	C_5	C_6	25. ±D
___	___	___	___	___	___	___	+/- ___

26. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

28. Original Wheelbase 298
Code to the nearest centimeter
(999) Unknown

___.__ inches X 2.54 = ____ centimeters

29. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? Ø
    (0) No post manufacturer modifications
    (1) Yes - post manufacturer modifications (specify): _____
    _____
    _____
    (Include photograph of CERTIFICATION PLACARD in case report)
    (9) Unknown if vehicle is modified

30. Fire Occurrence Ø
    (0) No fire

    Yes, fire occurred
    (1) Minor
    (2) Major
    (9) Unknown

31. Origin of Fire Ø
    (0) No fire
    (1) Vehicle exterior (front, side, back, top)
    (2) Exhaust system
    (3) Fuel tank (and other fuel retention system parts)
    (4) Engine compartment
    (5) Cargo/trunk compartment
    (6) Instrument panel
    (7) Passenger compartment area
    (8) Other location (specify): _____
    (9) Unknown

32. Type of Fuel Tank-1 1

33. Type of Fuel Tank-2 Ø
    (0) No fuel tank (electrical vehicle)
    (1) Metallic
    (2) Non-metallic
    (9) Unknown

34. Fuel Tank-1 Location 5

35. Fuel Tank-2 Location Ø
    (0) No fuel tank
    (1) Aft of center of the rear wheels (rear axle) centered
    (2) Aft of center of the rear wheels (rear axle) left side
    (3) Aft of center of the rear wheels (rear axle) right side
    (4) Forward of center of the rear wheels (rear axle) centered
    (5) Forward of center of the rear wheels (rear axle) left side
    (6) Forward of center of the rear wheels (rear axle) right side
    (7) Over center of the rear wheels (rear axle)
    (8) Other (specify): _____
    (9) Unknown

36. Fuel Tank-1 Filler Cap Location 4

37. Fuel Tank-2 Filler Cap Location Ø
    (0) No fuel tank
    (1) On back plane
    (2) Aft of center of the rear wheels (rear axle) on left side plane
    (3) Aft of center of the rear wheels (rear axle) on right side plane
    (4) Forward of center of the rear wheels (rear axle) on left side plane
    (5) Forward of center of the rear wheels (rear axle) on right side plane
    (6) Over the center of the rear wheels (rear axle) on left side plane
    (7) Over the center of the rear wheels (rear axle) on right side plane
    (8) Other (specify): _____
    (9) Unknown

38. Fuel Tank-1 Damage 1

39. Fuel Tank-2 Damage Ø
    (0) No fuel tank
    (1) No damage to fuel tank
    (2) Deformed, no seam failure
    (3) Deformed, with a seam failure
    (4) Punctured
    (5) Lacerated (ripped)
    (6) Abraded (scraped)
    (7) Filler neck separation from the fuel tank
    (8) Other damage (specify): _____
    (9) Unknown

40. Location of Fuel System-1 Leakage 1

41. Location of Fuel System-2 Leakage Ø
(0) No fuel tank
(1) No fuel leakage

Primary Area Of Leakage
(2) Tank
(3) Filler neck
(4) Cap
(5) Lines/pump/filter
(6) Vent/emission recovery
(8) Other (specify): _____
(9) Unknown

42. Fuel Type-1 01

43. Fuel Type-2 00

Single Fuel Type
(00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify): _____

Electric Powered or Electric/Solar Powered Vehicles
(10) Lead Acid Battery
(11) Nickel-Iron Battery
(12) Nickel-Cadmium Battery
(13) Sodium Metal Chloride Battery
(14) Sodium Sulfur Battery
(18) Other (Specify): _____

(98) Other Hybrid (specify): _____

(99) Unknown fuel type

44. Is This Vehicle Equipped With More Than Two Fuel Tanks? Ø
(0) No (one or two tanks only)

Yes - More Than Two Tanks
(1) Yes -- no damage to any tank or filler cap and no fuel system leakage
(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): _____
(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____
(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS *** (I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 02

INTEGRITY

4. Passenger Compartment Integrity: 06
(00) No integrity loss

Yes, Integrity Was Lost Through
(01) Windshield
(02) Door (side)
(03) Door/hatch (back door)
(04) Roof
(05) Roof glass
(06) Side window
(07) Rear window (backlight)
(08) Roof and roof glass
(09) Windshield and door (side)
(10) Windshield and roof
(11) Side and rear window (side window and backlight)
(12) Windshield and side window
(13) Door and side window
(98) Other combination of above (specify): _____
(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 3 7. LR 0 8. RR 0 9. TG/H 0

(0) No door/gate/hatch
(1) Door/gate/hatch remained closed and operational
(2) Door/gate/hatch came open during collision
(3) Door/gate/hatch jammed shut
(8) Other (specify): _____
(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision
(1) Door operational (no damage)
(2) Latch/striker failure due to damage
(3) Hinge failure due to damage
(4) Door structure failure due to damage
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
(6) Latch/striker and hinge failure due to damage
(8) Other failure (specify): _____
(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 6 17. RF 0 18. LR 8 19. RR 8
20. BL 0 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces
(2) Glazing in place and cracked from impact forces
(3) Glazing in place and holed from impact forces
(4) Glazing out-of-place (cracked or not) and not holed from impact forces
(5) Glazing out-of-place and holed from impact forces
(6) Glazing disintegrated from impact forces
(7) Glazing removed prior to accident
(8) No glazing
(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0
28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing
(1) Glazing contacted by occupant but no glazing damage
(2) Glazing in place and cracked by occupant contact
(3) Glazing in place and holed by occupant contact
(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(5) Glazing out-of-place by occupant contact and holed by occupant contact
(6) Glazing disintegrated by occupant contact
(9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As Ø

Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 0 34. LR 0 35. RR 0
36. BL 0 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing
(1) AS-1 — Laminated
(2) AS-2 — Tempered
(3) AS-3 — Tempered-tinted
(4) AS-14 — Glass/Plastic
(8) Other (specify): _____
(9) Unknown

Window Precrash Glazing Status

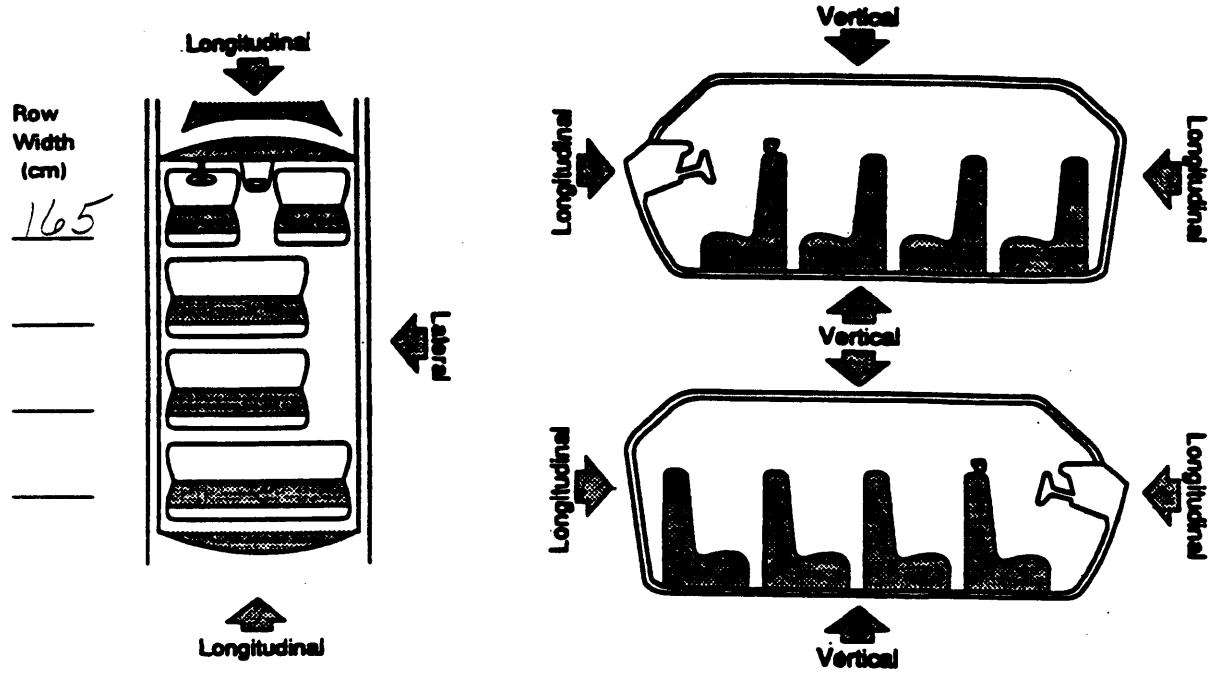
39. WS 1 40. LF 4 41. RF 0 42. LR 0 43. RR 0
44. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing
(1) Fixed
(2) Closed
(3) Partially opened
(4) Fully opened
(9) Unknown

INTRUSION WORKSHEET

Note: Sketch intruded areas

Row Width (cm): 165



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters) COMPARISON VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
11	A-PILLAR	37 3/4	–	32 1/4	=	5 1/2" = 14	LONG
11	TOE PAN	41 1/4	–	36	=	5 1/4" = 13	LONG
11	" "	36	–	34	=	2" = 5	LONG
11	DASH	24 1/2	–	19 1/2	=	5" = 13	LONG
11	SIDE PANEL	32	–	25	=	7" = 18	LAT
11	WINDSHIELD	33 1/2	–	28	=	5 1/2" = 14	LONG
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		
			–		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. 1 1	48. 2 7	49. 3	50. 3
2nd	51. 1 1	52. 0 6	53. 2	54. 2
3rd	55. 1 1	56. 1 4	57. 2	58. 2
4th	59. 1 1	60. 0 2	61. 2	62. 2
5th	63. 1 1	64. 0 5	65. 2	66. 2
6th	67. 1 2	68. 0 5	69. 1	70. 2
7th	71. ___ ___	72. ___ ___	73. ___	74. ___
8th	75. ___ ___	76. ___ ___	77. ___	78. ___
9th	79. ___ ___	80. ___ ___	81. ___	82. ___
10th	83. ___ ___	84. ___ ___	85. ___	86. ___

LOCATION OF INTRUSION

Front Seat
- (11) Left
- (12) Middle
- (13) Right

Second Seat
- (21) Left
- (22) Middle
- (23) Right

Third Seat
- (31) Left
- (32) Middle
- (33) Right

Fourth Seat
- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____
- (99) Unknown

INTRUDING COMPONENT

Interior Components
- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____
- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

Exterior Components
- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION
- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION
- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM SPOKE DEFORMATION

(All Measurements Are In Centimeters)

COMPARISON VALUE	–	DAMAGE VALUE	=	DEFORMATION
12 cm	–	10 cm	=	2 cm
	–		=	
	–		=	
	–		=	

STEERING COLUMN

87. Steering Column Type — 1
(1) Fixed column
(2) Tilt column
(3) Telescoping column
(4) Tilt and telescoping column
(8) Other column type (specify): _____
(9) Unknown

88. Blank — X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

89. Blank — X X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

90. Blank — X X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

91. Blank — X X X
(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.

92. Steering Rim/Spoke Deformation — 0 2
_____Code actual measured deformation to the nearest centimeter
(00) No steering rim deformation
(01-14) Actual measured value in centimeters
(15) 15 centimeters or more
(98) Observed deformation cannot be measured
(99) Unknown

93. Location of Steering Rim/Spoke Deformation — 0 6
(00) No steering rim deformation

Quarter Sections
(01) Section A
(02) Section B
(03) Section C
(04) Section D

Half Sections
(05) Upper half of rim/spoke
(06) Lower half of rim/spoke
(07) Left half of rim/spoke
(08) Right half of rim/spoke

(09) Complete steering wheel collapse
(10) Undetermined location
(99) Unknown

INSTRUMENT PANEL

94. Odometer Reading — 1 1 8,000
_____kilometers—Code to the nearest 1,000 kilometers
(000) No odometer
(001) Less than 1,500 kilometers
(500) 499,500 kilometers or more
(999) Unknown

73576 miles x 1.6093 = 118406 kilometers
Source: ODOMeteR

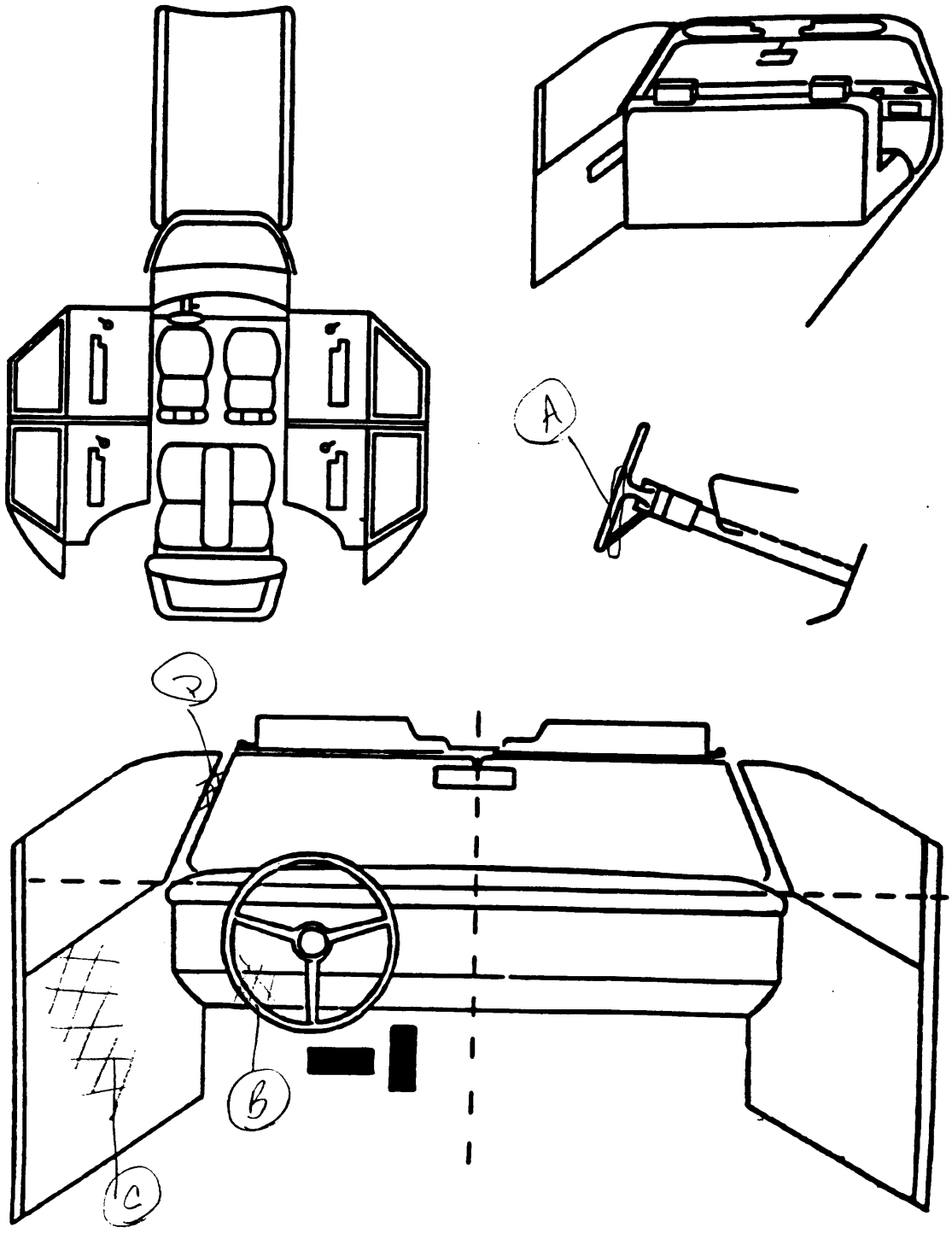
95. Instrument Panel Damage from Occupant Contact? — 1
(0) No
(1) Yes
(9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? — 8
(0) No
(1) Yes
(8) Not present
(9) Unknown

97. Did Glove Compartment Door Open During Collision(s)? — 1
(0) No
(1) Yes
(8) Not present
(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure.
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	06	DRIVER	Chest	Deformed	1
B	09	"	(L) Knee	BROKEN OUT	1
C	20	"	TORSO	CRACKED Deformed out	2
D	22	"	HEAD	Possible SKin TRANSFER	3
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT
- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify):_____
- (19) Other front object (specify):

LEFT SIDE
- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify):
- (28) Left side window sill

RIGHT SIDE
- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill

INTERIOR
- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):_____
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify):
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

ROOF
- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR
- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR
- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

CONFIDENCE LEVEL OF CONTACT POINT
- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
FIRST	Availability/Function	0	
	Deployment	0	
	Failure	0	

Air Bag System Availability/Function
- (0) Not equipped/not available
- (1) Air bag

Non-functional
- (2) Air bag disconnected (specify): _____
- (3) Air bag not reinstalled
- (9) Unknown

Air Bag System Deployment
- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

Are There Indications of Air Bag System Failure?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (9) Unknown

AUTOMATIC BELTS

		Left	Right
FIRST	Availability/Function		
	Use		
	Type		
	Proper Use		
	Failure Modes		

Automatic (Passive) Belt System Availability/Function
- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional
- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

Automatic (Passive) Belt System Use
- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative)
- (3) Automatic belt use unknown
- (9) Unknown

Automatic (Passive) Belt System Type
- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

Proper Use of Automatic (Passive) Belt System
- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

Automatic (Passive) Belt Failure Modes During Accident
- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify): _____
- (9) Unknown

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

   (0) No child safety seat
   (1) Infant seat
   (2) Toddler seat
   (3) Convertible seat
   (4) Booster seat
   (7) Other type child safety seat (specify):

   _____

   (8) Unknown child safety seat type
   (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

   (00) No child safety seat

   Designed for Rear Facing for This Age/Weight
   (01) Rear facing
   (02) Forward facing
   (08) Other orientation (specify):

   _____

   (09) Unknown orientation

   Designed for Forward Facing for This Age/Weight
   (11) Rear facing
   (12) Forward facing
   (18) Other orientation (specify):

   _____

   (19) Unknown orientation

   Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
   (21) Rear facing
   (22) Forward facing
   (28) Other orientation (specify):

   _____

   (29) Unknown orientation

   (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage
   Note: Options Below Are Used for Variables 3-5.

   (00) No child safety seat

   Not Designed with Harness/Shield/Tether
   (01) After market harness/shield/tether added, not used
   (02) After market harness/shield/tether used
   (03) Child safety seat used, but no after market harness/shield/tether added
   (09) Unknown if harness/shield/tether added or used

   Designed With Harness/Shield/Tether
   (11) Harness/shield/tether not used
   (12) Harness/shield/tether used
   (19) Unknown if harness/shield/tether used

   Unknown If Designed With Harness/Shield/Tether
   (21) Harness/shield/tether not used
   (22) Harness/shield/tether used
   (29) Unknown if harness/shield/tether used

   (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
   (Specify make/model and occupant number)

   _____

   _____

   _____

   _____

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Ocupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	3	4
	Evidence of usage	04	00	00
	Used in this crash?	0	0	0
	Proper Use	0	0	0
	Failure Modes			
SECOND	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

Manual (Active) Belt System Availability
- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed
- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____
- (9) Unknown

Manual (Active) Belt System Use
- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): _____
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

Proper Use of Manual (Active) Belts
- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly
- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of manual belt system (specify): _____
- (9) Unknown

Manual (Active) Belt Failure Modes During Accident
- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	0	0	0
	Seat Type	05	05	05
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
SECOND	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

(0) No head restraints
(1) Integral — no damage
(2) Integral — damaged during accident
(3) Adjustable — no damage
(4) Adjustable — damaged during accident
(5) Add-on — no damage
(6) Add-on — damaged during accident
(8) Other Specify): _____
(9) Unknown

Seat Type (this Occupant Position)

(00) Occupant not seated or no seat
(01) Bucket
(02) Bucket with folding back
(03) Bench
(04) Bench with separate back cushions
(05) Bench with folding back(s)
(06) Split bench with separate back cushions
(07) Split bench with folding back(s)
(08) Pedestal (i.e., column supported)
(09) Other seat type (specify): _____
(10) Box mounted seat (i.e., van type)
(99) Unknown

Seat Performance (this Occupant Position)

(0) Occupant not seated or no seat
(1) No seat performance failure(s)
(2) Seat adjusters failed
(3) Seat back folding locks or "seat back" failed specify: _____
(4) Seat tracks/anchors failed
(5) Deformed by impact of occupant
(6) Deformed by passenger compartment intrusion (specify): _____
(7) Combination of above (specify): _____
(8) Other (specify): _____
(9) Unknown

Seat Orientation (this Occupant Position)

(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify): _____
(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [✓] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): _____
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [ ] Yes [✓]

Describe entrapment mechanism: DRIVERS Left foot was stuck in the TOEPAN between the clutch and BRAKE pedal

Component(s): _____

(Note in vehicle interior diagram)

Appendix F:

NASS CDS Interview Form:

Case Vehicle Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 01

Interviewee(s) Role or Name(s): GRAND father of case vehicle driver & mother of driver

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

He was on his way home from work. I disagree w/ the sheriffs report that was on the wrong side of the ROAD. He was a good driver. He got all A's never dRANK or smoked. He always wore his seatbelt.

MOTHER

The curve there at the accident site has a speed limit of 35mph. the trucks speedometer was stopped at 45 mph. There was also someone who saw the accident but when the insurance guy asked them some questions they said they didn't see the accident. I think someone is trying to save their job

OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

We have no problem with signing a MEDICAL Release

the corsica was my car. I let him use it, his was being fixed.

ACCIDENT DIAGRAM

NORTH

The use of this diagram is optional. It may serve to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERVIEW FORM (B)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 01

Interviewee(s) Role or Name(s): GRAND father of DRIVER & MOTHER

ACCIDENT DATA QUESTIONS

1. Can you tell me in which direction you were traveling?

[ ] North [ ] South [ ] East [✓] West

(Optional - Where were you coming from or going to?

2. In which lane were you traveling?
(Note: Lane 1 is designated as the right curb lane.)

(1) [2] [3] [4] [ ] Other (specify):

3. Can you remember your estimated travel speed (in miles per hour) before the accident?

[ ] Stopped [ ] 1-10 [ ] 10-20
[ ] 20-30 [✓] 30-40 [ ] 40-50
[ ] 50-60 [ ] 60-70 [ ] 70+

4. Just before the accident, can you tell me what you were intending to do or were doing? UNK

[ ] Going straight [ ] Stopped
[ ] slowing [ ] Accelerating
[ ] Turning left [ ] Turning right
[ ] Changing lanes to left [ ] Changing lanes to right
[•] Backing
[ ] Other (specify):

5. Did you experience any loss of control due to weather conditions or mechanical problems? Don't think so

[ ] No
[ ] Yes (If yes, describe below)

6. Did you have to take any avoidance actions prior to the accident?

[ ] No - Go to question 7
[ ] Yes - Go to question 6a UNKnown

6a. What actions did you take?

[ ] Braking with lock-up
[ ] Braking without lock-up
[ ] Releasing brakes
[ ] Accelerating
[ ] Steering left
[ ] Steering right
[ ] Other (specify):

7. Where was your vehicle at the time of the collision?

[ ] Original travel lane [ ] Different travel lane
[ ] In intersection [ ] Off roadway to right
[ ] Off roadway to left
[ ] Other (specify): UNK

8. Was your travel speed at the time of the collision different from your previous travel speed?

[ ] No
[ ] Lower
[ ] Higher
[✓] Unknown

8a. Can you estimate your speed at the time of the collision?

[ ] Stopped [ ] 1-10 [ ] 10-20 UNK
[ ] 20-30 [ ] 30-40 [ ] 40-50
[ ] 50-60 [ ] 60-70 [ ] 70+

9. Immediately following the collision, can you describe how your vehicle moved to its stopped position?

Spun around to North shoulder

10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?

I think one

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 01
4. Occupant Number 01

VEHICLE/DRIVER DATA QUESTIONS

1. Can you tell me the year, make, model of your vehicle?
   1991 (Year) Chevrolet (Make) Corsica (Model)

2. Can you describe the damage to your vehicle?
   Left front corner & SIDE

3. Was there any previous damage to your vehicle that is not related to this accident?
   [✓] No
   [ ] Yes (If "yes", describe below)

4. Did any of the doors (hatch, tailgate) open during the accident?
   [✓] No
   [ ] Yes (If "Yes", describe below)

5. Did any of the windows break during the accident?
   [ ] No
   [✓] Yes (If "Yes", describe below)

6. Does your vehicle have a glove compartment?
   [ ] No
   [✓] Yes

6a. Did the glove compartment door come open during the accident?
   [ ] No
   [ ] Yes
   [✓] Unknown

7. Does your vehicle have "seat belts"?
   [ ] No (If "No", go to question 7b)
   [✓] Yes (If "Yes", go to question 7a)

7a. Can you describe the type of seat belt for each seat?

Driver's seat	[ ] Lap	[ ] Lap and shoulder
Front seat middle	[ ] Lap	[ ] Lap and shoulder
Front seat right	[ ] Lap	[ ] Lap and shoulder
VI Rear seat left	[ ] Lap	[ ] Lap and shoulder
Rear seat middle	[ ] Lap	[ ] Lap and shoulder
Rear seat right	[ ] Lap	[ ] Lap and shoulder

(Identify seat belts for third row and beyond

7b. Were any of the belts removed or not functional prior to the accident?
   [✓] No
   [ ] Yes (If "Yes", specify which belt and describe problem)

8. Do any of the front belts move along a motorized track when the door is opened or closed?
   [✓] No (If "No", go to question 9)
   [ ] Yes (If "Yes", what seat location?)
   [ ] Left Front
   [ ] Right Front

8a. Were the motorized belts working properly before the accident?
   [ ] No (If "No", describe condition below)
   [ ] Yes

8b. Were the belts connected to the track prior to the accident?
   [ ] No
   [ ] Yes
   [ ] Unknown

9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?
   [ ] No (go to question 10)
   [ ] Yes

9a. Does this belt come across the _____?
   [ ] Chest only
   [ ] Lap and chest

9b. Was this belt connected prior to the accident?
   [ ] No
   [ ] Yes
   [ ] Unknown

AIR BAGS

10. Is your vehicle equipped with a driver's side air bag?
   [ ] No (go to question 11)
   [✓] Yes (go to question 10a)
   [ ] Unknown (go to question 11)

10a. Did the air bag inflate during the accident?
   [ ] No (go to questions 10b and 10c)
   [✓] Yes (go to question 10e)

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 01
4. Occupant Number 01

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

10b. Was the air bag wiring disconnected prior to the accident?
[ ] No
[ ] Yes (If "Yes", describe previous condition)
_____
_____
[ ] Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?
[ ] No (go to question 11)
[ ] Yes (go to question 10d)
[ ] Unknown

10d. Was the air bag re-installed after the accident?
[ ] No (go to question 11)
[ ] Yes
[ ] Unknown

10e. Did the air bag inflate as you expected?
[ ] No (If "No" describe below)
_____
[ ] Yes
[✓] Unknown

11. Is your vehicle equipped with a passenger side air bag?
[✓] No (If "No", go to question 12)
[ ] Yes (If "Yes", go to question 11a)
[ ] Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?
[ ] No (go to question 11b)
[ ] Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?
[ ] No
[ ] Yes (If "Yes", describe below)
_____
_____
[ ] Unknown

11c. Was the passenger air bag inflated in a previous accident?
[ ] No (go to question 12)
[ ] Yes (go to question 11d)
[ ] Unknown

11d. Was the passenger air bag re-installed after the accident?
[ ] No (go to question 12)
[ ] Yes
[ ] Unknown

11e. Did the passenger air bag inflate as you expected?
[ ] No (If "No" describe below)
_____
[ ] Yes
[ ] Unknown

CHILD SAFETY SEAT

12. Was there a person in a child safety seat in your vehicle?
[✓] No (If "No", go to question 13)
[ ] Yes
[ ] Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?
_____
_____

12b. Can you describe the type of child safety seat?
[ ] Infant
[ ] Toddler
[ ] Convertible
[ ] Booster
[ ] Other (specify): _____
[ ] Unknown

12c. Where was the child safety seat(s) located?
[12] [13]
[21] [22] [23]
[31] [32] [33]
[Other] (specify): _____

12d. Can you tell me which direction the child safety seat was facing prior to the accident?
[ ] Rear facing
[ ] Forward facing,
[ ] Other (specify):_____
[ ] Unknown

12e. Was a seat belt used to hold the child seat in place?
[ ] No (If "No", go to question 12g)
[ ] Yes (If "Yes", go to question 12f)
[ ] Unknown

12f. Can you describe how the seat belt was secured to the child seat?
[ ] Looped through designated rear framing struts?
[ ] Looped through arm rest slots?
[ ] Belt across safety shield?
[ ] Looped through rear frame outside the designated framing struts?
[ ] Other (specify): _____
[ ] Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)
[ ] Harness
[ ] Shield
[ ] Tether strap

If any box is checked, ask questions 12h - 12i.

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 01
4. Occupant Number 01

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

12h. Were any of these items added after you owned the child safety seat?
[ ] Yes
(specify_____)
[ ] No
[ ] Unknown

12i. Were any of these items used during the accident?
[ ] Yes (If "Yes", check all that apply)
( ) Harness
( ) Shield
( ) Tether strap)
[ ] No
[ ] Unknown

CARGO WEIGHT AND MILEAGE

13. Was there any cargo in your vehicle?
[ ] No (If "No", go to question 14)
[ ] Yes (If "Yes", go to question 13a)
[ ] Unknown

13a. Can you estimate the weight of the cargo?

0 lbs.

Cargo description none

14. Can you tell me the mileage on the vehicle?

_____miles

OPTIONAL

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?
SALVAGE YARD

16. May I take a look at your vehicle to assess the damage?
[ ] No
[ ] Yes N/A

DRIVER ONLY

17. What race do you consider yourself?
[✓] White
[ ] Black
[ ] American Indian, Eskimo or Aleut, Asian or Pacific Islander
[ ] Other (specify:_____)
[ ] Unknown.

18. Are you of hispanic origin?
[✓] No
[ ] Yes

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 94099
3. Vehicle Number 01
4. Occupant Number 01

VEHICLE ROLLOVER/FIRE QUESTIONS

ROLLOVER QUESTIONS

1. Did the vehicle rollover during the accident?
   [✓] No (If "No", go to question 2.)
   [ ] Yes
   [ ] Unknown (skip to question 2)

1a. Describe where the rollover began.
   [ ] On roadway
   [ ] On shoulder
   [ ] On roadside or median
   [ ] Unknown

1b. What caused the vehicle to rollover?
   [ ] Other vehicle (specify vehicle number):_____
   [ ] Contacted object (specify): _____
   [ ] Other cause (specify):
   _____
   [ ] Unknown

1c. Describe which direction the vehicle rolled.
   [ ] Toward the right
   [ ] Toward the left
   [ ] End-over-end
   [ ] Unknown

1d. Estimate the number of sides (including the top and bottom) which contacted the ground during the rollover?
   [ ] 1 side
   [ ] 2 sides
   [ ] 3 sides
   [ ] 4 sides
   [ ] Unknown

1e. Did the vehicle roll over more than one complete turn (more than 4 sides)?
   [ ] No (If "No", go to question 1g.)
   [ ] Yes

1f. Estimate the number of complete turns.
   [ ] No
   [ ] Yes (specify): _____
   [ ] Unknown

1g. When the vehicle stopped rolling over, which side of the vehicle was in contact with the ground?
   [ ] Left side
   [ ] Right side
   [ ] Top
   [ ] Wheels
   [ ] Unknown

FIRE QUESTIONS

2. Did the vehicle experience a fire?
   [✓] No (If "No", skip to Occupant Data Questions)
   [ ] Yes
   [ ] Unknown

2a. Describe where the fire started or where smoke was first seen.
   [ ] Under the hood
   [ ] Behind the instrument panel
   [ ] In the passenger compartment
   [ ] In the trunk/cargo area
   [ ] Under the vehicle
   [ ] From other involved vehicle
   [ ] Unknown

2b. Did the fire start with the electrical system?
   [ ] No
   [ ] Yes (specify): _____
   [ ] Unknown

2c. Did the fire start with the fuel system?
   [ ] No (If "No", skip to Occupant Data Questions)
   [ ] Yes (go to question 2d)
   [ ] Unknown

2d. Describe which part of the fuel system that may have been involved?
   [ ] No
   [ ] Yes (specify): _____
   ___ Fuel tank
   ___ Fuel lines
   ___ Engine compartment (specify component if known)
   [ ] Unknown

(Go To Occupant Data Questions)

COMMENTS ON ROLLOVERS AND FIRES

_____

_____

_____

_____

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 01
4. Occupant Number: 01

OCCUPANT DATA QUESTIONS

1. Was there anyone else in your vehicle at the time of the accident?
[✓] No (If "No", go to question 4)
[ ] Yes (If "Yes", specify number in question 2 below and then go to question 3)
[ ] Unknown

2. How many?
[1] One other person
[2] Two other persons
[3] Three other persons
[4] Four other persons
[5] Five other persons
[6] Six other persons
[7] Seven or more other persons
(specify number:)_____

3. Where was this person sitting? (Circle seating positions)

	[12]	[13]
[21]	[22]	[23]
[31]	[32]	[33]

[ ] Other (specify:)_____

OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?
Height 6'2 Weight 170 Age 23
Sex: [✓] Male [ ] Female

OCCUPANT POSTURE

5. Can you tell me how you (he/she was) were sitting in your vehicle?
UNKnown

5a. Can you describe the location of your (his/her) feet just prior to the collision?
unKnown

5b. Can you describe the location of your (his/her) arms?
He was Always a carefil driver usually both hands on wheel

5c. Was your (his/her) back resting against the seat back rest?
[ ] No (If "No", describe the position)
[✓] Yes
[ ] Unknown
PER MOTHER

5d. Were you (Was he/she)
[ ] Sitting upright or
[ ] Leaning to left side, or
[ ] Leaning to right side?

OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?
[✓] No (If "No", go to question 7)
[ ] Yes (If "Yes", go to question 6a)
[ ] Unknown

6a. Can you remember out of what area of the vehicle you were (he/she was) thrown?
[ ] No
[ ] Yes (Describe:)_____

OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?
[ ] No (If "No", go to question 8)
[✓] Yes
[ ] Unknown

7a. Were you (Was he/she) wearing the
[ ] Lap belt?
[✓] Lap and Shoulder belt?
[ ] Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?
[ ] Across the stomach
[ ] Low on lap
[ ] Other (specify:)_____
[✓] Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?
[ ] Over the shoulder
[ ] Under the arm
[ ] Behind the back
[ ] Behind the seat
[ ] Other (specify:)_____

7d. Did any part of the belt system break or tear?
[✓] No
[ ] Yes (If "Yes", describe)_____
[ ] Unknown

OCCUPANT ENTRAPMENT

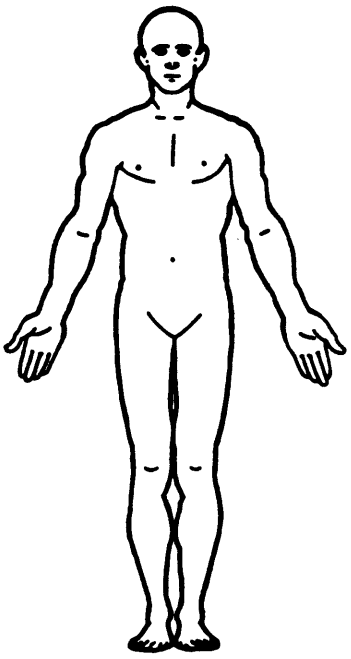
8. Were you (Was he/she) trapped in the vehicle?
[ ] No
[✓] Yes (If "Yes", describe)
DOORS Jammed roof collasped
[ ] Unknown

PSU Number 10 Case Number—Stratum 9409 Vehicle Number 01 Occupant Number 01

INJURY DATA FROM INTERVIEWEE(S)

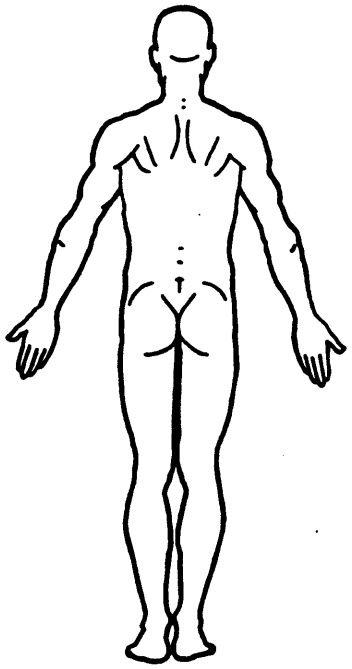
Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Grandfather

SOFT TISSUE/INTERNAL INJURIES

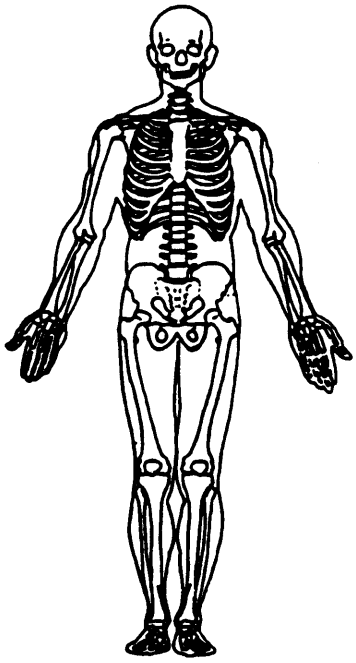


NO broken bones

NO facial injuries

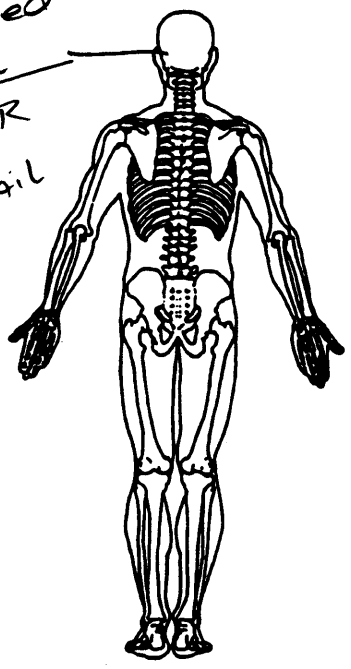


SKELETAL INJURIES



(L) REAR CRACKED SKULL

A-PILLAR OR ROOF RAIL



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 01
4. Occupant Number: 01

OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?
   [ ] No (If "No", skip to question 7)
   [✓] Yes (If "Yes", complete Occupant Injury Questions)
   [ ] Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?
   [ ] No (go to question 3)
   [ ] Yes (If "Yes", record the exact location(s) and size on the manikin(s).)
   [✓] Unknown

2a. Do you know what caused your (his/her) injury(s)?
   [ ] No
   [ ] Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
   [ ] Unknown

3. Did you (he/she) experience any broken bones?
   [✓] No (If "No", go to question 4)
   [ ] Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)
   [ ] Unknown

3a. Do you know what caused the injury(s)?
   [ ] No
   [ ] Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
   [ ] Unknown

4. Did you (he/she) injure your (his/her) head? (skull/brain?)
   [ ] No (If "No", go to question 5)
   [✓] Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)
   [ ] Unknown

4a. Do you know what caused the injury(s)?
   [ ] No
   [✓] Yes (If "Yes", specify the component(s) on the manikin(s).)
   [ ] Unknown

5. Were any of your (his/her) internal organs injured?
   [ ] No (If "No", go to question 6)
   [ ] Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)
   [✓] Unknown

5a. Do you know what caused this injury?
   [ ] No
   [ ] Yes (If "Yes", specify the component(s) on the manikin(s).)
   [ ] Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?
   [ ] No (If "No", go to question 7)
   [ ] Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)
   [✓] Unknown

6a. Do you know what caused the injury(s)?
   [ ] No
   [ ] Yes (If "Yes", specify the component(s) on the manikin(s).)
   [ ] Unknown

7. Did you (he/she) receive any treatment?
   [ ] No (If "No", go to question 8)
   [✓] Yes (If "Yes", go to question 7a or return to question 2.)

7a. Were you (Was he/she) treated by (check all that apply):
   [✓] Hospital/trauma center? (specify hospital name): _____
   [ ] Medical clinic
   [ ] Out patient surgery? (specify medical facility:)_____
   [✓] Paramedics or first aid at the scene?
   [ ] A doctor in his/her office?
   [ ] Treated at home?
   [ ] None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?
   [✓] No (If "No", go to question 7c.)
   [ ] Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?
   [✓] No (If "No", give an explanation)
   [ ] Yes (If "Yes", go to question 7d.)

   FATAL

7d. How many days were you (was he/she) in the hospital?
   _____ days

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 01
4. Occupant Number 01

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment? FATAL
[ ] No
[ ] Yes (If "Yes", describe:)
_____
_____
[ ] Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?
[ ] No
[✓] Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)? FATAL
[ ] No
[ ] Yes (If "Yes", determine the number of days lost) (Specify:)_____
[ ] Not working prior to the accident
[ ] Unknown

Appendix G:

NASS CDS Interview Form:

Vehicle #2 Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 02

Interviewee(s) Role or Name(s): DRIVER V2

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

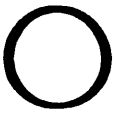
If the driver was not the person interviewed, was an appointment made for a follow-up interview?

DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

EAST on Rt (2 lane ROAD) CAME OVER hill, saw other CAR coming at me in my lane, I thought he was going to turn but he Kept coming at me I tried to AVOID him by BRAKING and steering Right but we hit. I went off the ROAD to the Right ended up on someones lawn. The other guy spun around and ended up facing the opposite way he was going on the edge of the ROADWAY

OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

ACCIDENT DIAGRAM



NORTH

The use of this diagram is optional. It may serve to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

U.S. Department of Transportation
National Highway Traffic Safety Administration

INTERVIEW FORM (B)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 02

Interviewee(s) Role or Name(s): DRIVER V2

ACCIDENT DATA QUESTIONS

1. Can you tell me in which direction you were traveling?

[ ] North [ ] South [✓] East [ ] West

(Optional - Where were you coming from or going to?

2. In which lane were you traveling?
(Note: Lane 1 is designated as the right curb lane.)

(1) [2] [3] [4] [ ] Other (specify):

3. Can you remember your estimated travel speed (in miles per hour) before the accident?

[ ] Stopped	[ ] 1-10	[ ] 10-20
[ ] 20-30	[ ] 30-40	[✓] 40-50
[ ] 50-60	[ ] 60-70	[ ] 70+

4. Just before the accident, can you tell me what you were intending to do or were doing?

[✓] Going straight	[ ] Stopped
[ ] slowing	[ ] Accelerating
[ ] Turning left	[ ] Turning right
[ ] Changing lanes to left	[ ] Changing lanes to right
[ ] Backing	

[ ] Other (specify): coming over hill on curve

5. Did you experience any loss of control due to weather conditions or mechanical problems?

[✓] No
[ ] Yes (If yes, describe below)

6. Did you have to take any avoidance actions prior to the accident?

[ ] No - Go to question 7
[✓] Yes - Go to question 6a

6a. What actions did you take?

[✓] Braking with lock-up
[ ] Braking without lock-up
[ ] Releasing brakes
[ ] Accelerating
[ ] Steering left
[✓] Steering right
[ ] Other (specify):

7. Where was your vehicle at the time of the collision?

[✓] Original travel lane	[ ] Different travel lane
[ ] In intersection	[ ] Off roadway to right
[ ] Off roadway to left	

[ ] Other (specify):

8. Was your travel speed at the time of the collision different from your previous travel speed?

[ ] No
[✓] Lower slightly
[ ] Higher
[ ] Unknown

8a. Can you estimate your speed at the time of the collision?

[ ] Stopped	[ ] 1-10	[ ] 10-20
[ ] 20-30	[ ] 30-40	[✓] 40-50
[ ] 50-60	[ ] 60-70	[ ] 70+

9. Immediately following the collision, can you describe how your vehicle moved to its stopped position?

spun around ended up facing North, I think.

10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?

just 1

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 02
4. Occupant Number: 01

VEHICLE/DRIVER DATA QUESTIONS

1. Can you tell me the year, make, model of your vehicle?
   1988 (Year) Chevy (Make) Cheyenne (Model)
2. Can you describe the damage to your vehicle?
   front
3. Was there any previous damage to your vehicle that is not related to this accident?
   [✓] No
   [ ] Yes (If "yes", describe below)
4. Did any of the doors (hatch, tailgate) open during the accident?
   [✓] No
   [ ] Yes (If "Yes", describe below)
5. Did any of the windows break during the accident?
   [ ] No
   [ ] Yes (If "Yes", describe below)
   unknown
6. Does your vehicle have a glove compartment?
   [ ] No
   [✓] Yes
6a. Did the glove compartment door come open during the accident?
   [✓] No
   [ ] Yes
   [ ] Unknown
7. Does your vehicle have "seat belts"?
   [ ] No (If "No", go to question 7b)
   [✓] Yes (If "Yes", go to question 7a)
7a. Can you describe the type of seat belt for each seat?

Driver's seat	[ ] Lap	[✓] Lap and shoulder
Front seat middle	[✓] Lap	[ ] Lap and shoulder
Front seat right	[ ] Lap	[✓] Lap and shoulder
Rear seat left	[ ] Lap	[ ] Lap and shoulder
Rear seat middle	[ ] Lap	[ ] Lap and shoulder
Rear seat right	[ ] Lap	[ ] Lap and shoulder

(Identify seat belts for third row and beyond

7b. Were any of the belts removed or not functional prior to the accident?
   [✓] No
   [ ] Yes (If "Yes", specify which belt and describe problem)
8. Do any of the front belts move along a motorized track when the door is opened or closed?
   [✓] No (If "No", go to question 9)
   [ ] Yes (If "Yes", what seat location?)
      [ ] Left Front
      [ ] Right Front
8a. Were the motorized belts working properly before the accident?
   [ ] No (If "No", describe condition below)
   [ ] Yes
8b. Were the belts connected to the track prior to the accident?
   [ ] No
   [ ] Yes
   [ ] Unknown
9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?
   [✓] No (go to question 10)
   [ ] Yes
9a. Does this belt come across the _____?
   [ ] Chest only
   [ ] Lap and chest
9b. Was this belt connected prior to the accident?
   [ ] No
   [ ] Yes
   [ ] Unknown

AIR BAGS

10. Is your vehicle equipped with a driver's side air bag?
   [✓] No (go to question 11)
   [ ] Yes (go to question 10a)
   [ ] Unknown (go to question 11)
10a. Did the air bag inflate during the accident?
   [ ] No (go to questions 10b and 10c)
   [ ] Yes (go to question 10e)

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 02
4. Occupant Number 01

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

10b. Was the air bag wiring disconnected prior to the accident?
[ ] No
[ ] Yes (If "Yes", describe previous condition)
_____
_____
[ ] Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?
[ ] No (go to question 11)
[ ] Yes (go to question 10d)
[ ] Unknown

10d. Was the air bag re-installed after the accident?
[ ] No (go to question 11)
[ ] Yes
[ ] Unknown

10e. Did the air bag inflate as you expected?
[ ] No (If "No" describe below)
_____
[ ] Yes
[ ] Unknown

11. Is your vehicle equipped with a passenger side air bag?
[✓] No (If "No", go to question 12)
[ ] Yes (If "Yes", go to question 11a)
[ ] Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?
[ ] No (go to question 11b)
[ ] Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?
[ ] No
[ ] Yes (If "Yes", describe below)
_____
_____
[ ] Unknown

11c. Was the passenger air bag inflated in a previous accident?
[ ] No (go to question 12)
[ ] Yes (go to question 11d)
[ ] Unknown

11d. Was the passenger air bag re-installed after the accident?
[ ] No (go to question 12)
[ ] Yes
[ ] Unknown

11e. Did the passenger air bag inflate as you expected?
[ ] No (If "No" describe below)
_____
[ ] Yes
[ ] Unknown

CHILD SAFETY SEAT

12. Was there a person in a child safety seat in your vehicle?
[✓] No (If "No", go to question 13)
[ ] Yes
[ ] Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?
_____
_____

12b. Can you describe the type of child safety seat?
[ ] Infant
[ ] Toddler
[ ] Convertible
[ ] Booster
[ ] Other (specify): _____
[ ] Unknown

12c. Where was the child safety seat(s) located?
[12] [13]
[21] [22] [23]
[31] [32] [33]
[Other] (specify): _____

12d. Can you tell me which direction the child safety seat was facing prior to the accident?
[ ] Rear facing
[ ] Forward facing,
[ ] Other (specify):_____
[ ] Unknown

12e. Was a seat belt used to hold the child seat in place?
[ ] No (If "No", go to question 12g)
[ ] Yes (If "Yes", go to question 12f)
[ ] Unknown

12f. Can you describe how the seat belt was secured to the child seat?
[ ] Looped through designated rear framing struts?
[ ] Looped through arm rest slots?
[ ] Belt across safety shield?
[ ] Looped through rear frame outside the designated framing struts?
[ ] Other (specify): _____
[ ] Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)
[ ] Harness
[ ] Shield
[ ] Tether strap

If any box is checked, ask questions 12h - 12i.

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 02
4. Occupant Number 01

VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

12h. Were any of these items added after you owned the child safety seat?
[ ] Yes
(specify_____)
[ ] No
[ ] Unknown

12i. Were any of these items used during the accident?
[ ] Yes (If "Yes", check all that apply)
( ) Harness
( ) Shield
( ) Tether strap)
[ ] No
[ ] Unknown

CARGO WEIGHT AND MILEAGE

13. Was there any cargo in your vehicle?
[✓] No (If "No", go to question 14)
[ ] Yes (If "Yes", go to question 13a)
[ ] Unknown just a couple school books

13a. Can you estimate the weight of the cargo?

0 lbs.

Cargo description

14. Can you tell me the mileage on the vehicle?

✓ _____ miles

OPTIONAL

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?
SALVAGE.

16. May I take a look at your vehicle to assess the damage?
[ ] No
[✓] Yes

DRIVER ONLY

17. What race do you consider yourself?
[✓] White
[ ] Black
[ ] American Indian, Eskimo or Aleut, Asian or Pacific Islander
[ ] Other (specify:_____)
[ ] Unknown.

18. Are you of hispanic origin?
[✓] No
[ ] Yes

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 02
4. Occupant Number 01

VEHICLE ROLLOVER/FIRE QUESTIONS

ROLLOVER QUESTIONS

1. Did the vehicle rollover during the accident?
   [✓] No (If "No", go to question 2.)
   [ ] Yes
   [ ] Unknown (skip to question 2)

1a. Describe where the rollover began.
   [ ] On roadway
   [ ] On shoulder
   [ ] On roadside or median
   [ ] Unknown

1b. What caused the vehicle to rollover?
   [ ] Other vehicle (specify vehicle number):_____
   [ ] Contacted object (specify): _____
   [ ] Other cause (specify):
   _____
   [ ] Unknown

1c. Describe which direction the vehicle rolled.
   [ ] Toward the right
   [ ] Toward the left
   [ ] End-over-end
   [ ] Unknown

1d. Estimate the number of sides (including the top and bottom) which contacted the ground during the rollover?
   [ ] 1 side
   [ ] 2 sides
   [ ] 3 sides
   [ ] 4 sides
   [ ] Unknown

1e. Did the vehicle roll over more than one complete turn (more than 4 sides)?
   [ ] No (If "No", go to question 1g.)
   [ ] Yes

1f. Estimate the number of complete turns.
   [ ] No
   [ ] Yes (specify): _____
   [ ] Unknown

1g. When the vehicle stopped rolling over, which side of the vehicle was in contact with the ground?
   [ ] Left side
   [ ] Right side
   [ ] Top
   [ ] Wheels
   [ ] Unknown

FIRE QUESTIONS

2. Did the vehice experience a fire?
   [✓] No (If "No", skip to Occupant Data Questions)
   [ ] Yes
   [ ] Unknown

2a. Describe where the fire started or where smoke was first seen.
   [ ] Under the hood
   [ ] Behind the instrument panel
   [ ] In the passenger compartment
   [ ] In the trunk/cargo area
   [ ] Under the vehicle
   [ ] From other involved vehicle
   [ ] Unknown

2b. Did the fire start with the electrical system?
   [ ] No
   [ ] Yes (specify): _____
   [ ] Unknown

2c. Did the fire start with the fuel system?
   [ ] No (If "No", skip to Occupant Data Questions)
   [ ] Yes (go to question 2d)
   [ ] Unknown

2d. Describe which part of the fuel system that may have been involved?
   [ ] No
   [ ] Yes (specify): _____
   ___ Fuel tank
   ___ Fuel lines
   ___ Engine compartment (specify component if known)
   [ ] Unknown

(Go To Occupant Data Questions)

COMMENTS ON ROLLOVERS AND FIRES

_____

_____

_____

_____

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 02
4. Occupant Number: 01

OCCUPANT DATA QUESTIONS

1. Was there anyone else in your vehicle at the time of the accident?
   [✓] No (If "No", go to question 4)
   [ ] Yes (If "Yes", specify number in question 2 below and then go to question 3)
   [ ] Unknown

2. How many?
   [1] One other person
   [2] Two other persons
   [3] Three other persons
   [4] Four other persons
   [5] Five other persons
   [6] Six other persons
   [7] Seven or more other persons
   (specify number:)_____

3. Where was this person sitting? (Circle seating positions)

	[12]	[13]
[21]	[22]	[23]
[31]	[32]	[33]

[ ] Other (specify:)_____

OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?
   Height 5'3" Weight 165 Age 28
   Sex: [ ] Male [✓] Female

OCCUPANT POSTURE

5. Can you tell me how you (he/she was) were sitting in your vehicle?
   upright bracing for accident

5a. Can you describe the location of your (his/her) feet just prior to the collision?
   BRACED l on clutch other on brake

5b. Can you describe the location of your (his/her) arms?
   straight bracing against steering wheel

5c. Was your (his/her) back resting against the seat back rest?
   [ ] No (If "No", describe the position)_____
   [✓] Yes
   [ ] Unknown

5d. Were you (Was he/she)
   [✓] Sitting upright or
   [ ] Leaning to left side, or
   [ ] Leaning to right side?

OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?
   [✓] No (If "No", go to question 7)
   [ ] Yes (If "Yes", go to question 6a)
   [ ] Unknown

6a. Can you remember out of what area of the vehicle you were (he/she was) thrown?
   [ ] No
   [ ] Yes (Describe:)_____

OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?
   [✓] No (If "No", go to question 8)
   [ ] Yes
   [ ] Unknown

7a. Were you (Was he/she) wearing the
   [ ] Lap belt?
   [ ] Lap and Shoulder belt?
   [ ] Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?
   [ ] Across the stomach
   [ ] Low on lap
   [ ] Other (specify:)_____
   [ ] Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?
   [ ] Over the shoulder
   [ ] Under the arm
   [ ] Behind the back
   [ ] Behind the seat
   [ ] Other (specify:)_____

7d. Did any part of the belt system break or tear?
   [ ] No
   [ ] Yes (If "Yes", describe)_____
   [ ] Unknown

OCCUPANT ENTRAPMENT

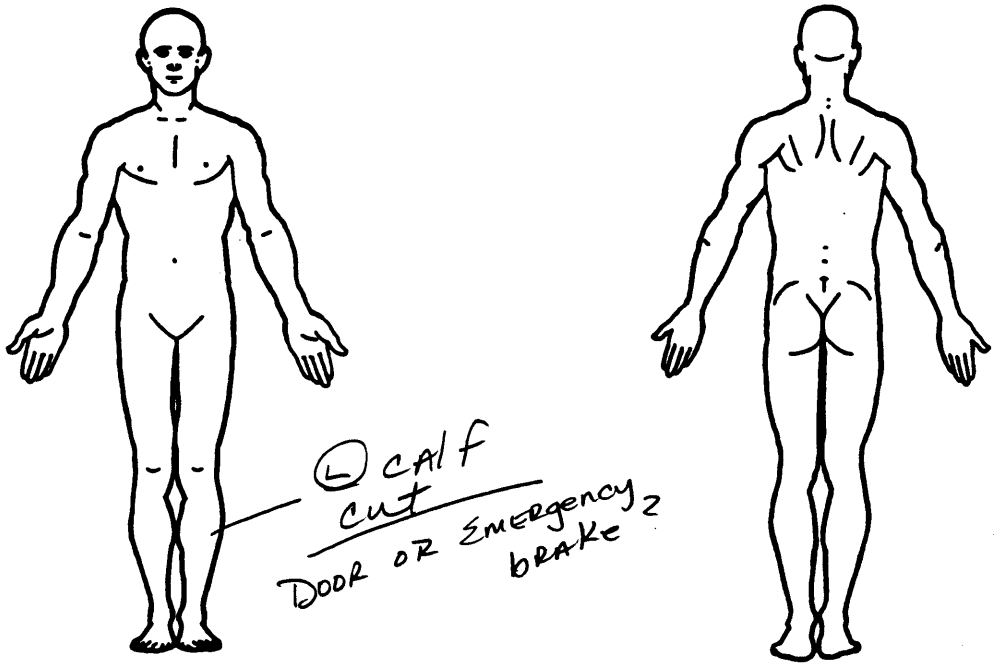
8. Were you (Was he/she) trapped in the vehicle?
   [ ] No
   [✓] Yes (If "Yes", describe) Ankle stuck between toe pan And pedal
   [ ] Unknown

PSU Number 10 Case Number–Stratum 9409 Vehicle Number 02 Occupant Number 01

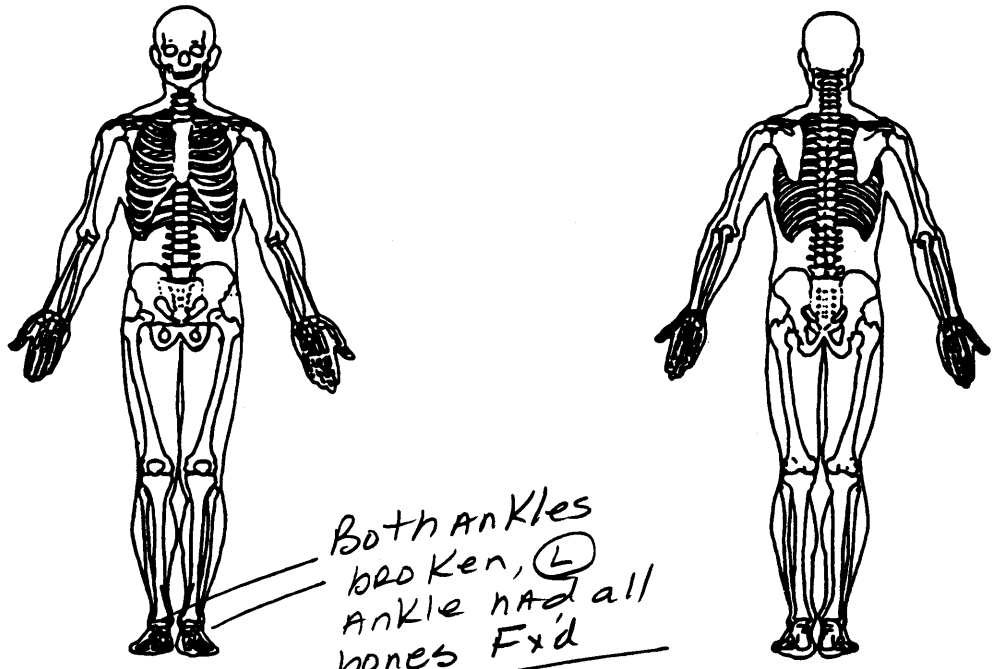
INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): DRIVER

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 02
4. Occupant Number: 01

OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?
   [ ] No (If "No", skip to question 7)
   [✓] Yes (If "Yes", complete Occupant Injury Questions)
   [ ] Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?
   [ ] No (go to question 3)
   [✓] Yes (If "Yes", record the exact location(s) and size on the manikin(s).)
   [ ] Unknown

2a. Do you know what caused your (his/her) injury(s)?
   [ ] No
   [✓] Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
   [ ] Unknown

3. Did you (he/she) experience any broken bones?
   [ ] No (If "No", go to question 4)
   [✓] Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)
   [ ] Unknown

3a. Do you know what caused the injury(s)?
   [ ] No
   [✓] Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
   [ ] Unknown

4. Did you (he/she) injure your (his/her) head? (skull/brain?)
   [✓] No (If "No", go to question 5)
   [ ] Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)
   [ ] Unknown

4a. Do you know what caused the injury(s)?
   [ ] No
   [ ] Yes (If "Yes", specify the component(s) on the manikin(s).)
   [ ] Unknown

5. Were any of your (his/her) internal organs injured?
   [✓] No (If "No", go to question 6)
   [ ] Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)
   [ ] Unknown

5a. Do you know what caused this injury?
   [ ] No
   [ ] Yes (If "Yes", specify the component(s) on the manikin(s).)
   [ ] Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?
   [✓] No (If "No", go to question 7)
   [ ] Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)
   [ ] Unknown

6a. Do you know what caused the injury(s)?
   [ ] No
   [ ] Yes (If "Yes", specify the component(s) on the manikin(s).)
   [ ] Unknown

7. Did you (he/she) receive any treatment?
   [ ] No (If "No", go to question 8)
   [✓] Yes (If "Yes", go to question 7a or return to question 2.)

7a. Were you (Was he/she) treated by (check all that apply):
   [✓] Hospital/trauma center? (specify hospital name): Hosp KENT.
   [ ] Medical clinic
   [ ] Out patient surgery? (specify medical facility:)_____
   [✓] Paramedics or first aid at the scene?
   [ ] A doctor in his/her office?
   [ ] Treated at home?
   [ ] None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?
   [✓] No (If "No", go to question 7c.)
   [ ] Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?
   [ ] No (If "No", give an explanation)
   [✓] Yes (If "Yes", go to question 7d.)

_____

_____

7d. How many days were you (was he/she) in the hospital?
   6 1/2 days

1. Primary Sampling Unit Number 10
2. Case Number - Stratum 9409
3. Vehicle Number 02
4. Occupant Number 01

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?
[ ] No
[ ] Yes (If "Yes", describe:)
NOT YET
[ ] Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?
[ ] No
[✓] Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?
[ ] No
[✓] Yes (If "Yes", determine the number of days lost)
(Specify:) 1 SCHOOL DAY
[ ] Not working prior to the accident
[ ] Unknown
FINAL EXAM

Appendix H:

NASS CDS Occupant Assessment Form:

Case Vehicle Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT ASSESSMENT FORM

Form Approved
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 01
4. Occupant Number: 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age: 23
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older
(99) Unknown

6. Occupant's Sex: 1
(1) Male
(2) Female
(9) Unknown

7. Occupant's Height: 188
Code actual height to the nearest centimeter.
(999) Unknown
74 inches X 2.54 = 188 centimeters
AUTOPSY

8. Occupant's Weight: 081
Code actual weight to the nearest kilogram.
(999)Unknown
178 pounds X .4536 = 81 kilograms
AUTOPSY

9. Occupant's Role: 1
(1) Driver
(2) Passenger
(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position: 11
Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify): _____
(15) On or in the lap of another occupant

Second Seat
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify): _____
(25) On or in the lap of another occupant

Third Seat
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify): _____
(35) On or in the lap of another occupant

Fourth Seat
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify): _____
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify): _____
(99) Unknown

11. Occupant's Posture: 9
(0) Normal posture

Abnormal posture
(1) Kneeling or standing on seat
(2) Lying on or across seat
(3) Kneeling, standing or sitting in front of seat
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window
(5) Sitting on a console
(6) Lying back in a reclined seat position
(7) Bracing with feet or hands on a surface in front of seat
(8) Other abnormal posture (specify): _____
(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection [0]
    (0) No ejection
    (1) Complete ejection
    (2) Partial ejection
    (3) Ejection, unknown degree
    (9) Unknown

13. Ejection Area [0]
    (0) No ejection
    (1) Windshield
    (2) Left front
    (3) Right front
    (4) Left rear
    (5) Right rear
    (6) Rear
    (7) Roof
    (8) Other area (e.g., back of pickup, etc.) (specify):_____
    (9) Unknown

14. Ejection Medium [0]
    (0) No ejection
    (1) Door/hatch/tailgate
    (2) Nonfixed roof structure
    (3) Fixed glazing
    (4) Nonfixed glazing (specify):
    _____
    (5) Integral structure
    (8) Other medium (specify):
    _____
    (9) Unknown

15. Medium Status (Immediately Prior To Impact) [0]
    (0) No ejection
    (1) Open
    (2) Closed
    (3) Integral structure
    (9) Unknown

16. Entrapment [0]
    (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
    (0) Not entrapped
    (1) Entrapped
    (9) Unknown

both front doors JAMMED closed

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability — 4
(0) None available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available—type unknown

Integral Belt Partially Destroyed
(6) Shoulder belt (lap belt destroyed/removed)
(7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown

18. Manual (Active) Belt System Use — 04
(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify): _____
(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used—type unknown
(08) Other belt used (specify): _____
(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat—type unknown
(18) Other belt used with child safety seat (specify): _____
(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts — 9
(0) None used or not available
(1) Belt used properly
(2) Belt used properly with child safety seat

Belt Used Improperly
(3) Shoulder belt worn under arm
(4) Shoulder belt worn behind back or seat
(5) Belt worn around more than one person
(6) Lap belt worn on abdomen
(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of manual belt system (specify): _____
(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident — 1
(0) No manual belt used
(1) No manual belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other manual belt failure (specify): _____
(9) Unknown

21. Air Bag System Availability/Function — 1
(0) Not equipped/not available
(1) Air bag

Non-functional
(2) Air bag disconnected (specify): _____
(3) Air bag not reinstalled
(9) Unknown

22. Air Bag System Deployment — 1
(0) Not equipped/not available
(1) Air bag deployed during accident (as a result of impact)
(2) Air bag deployed inadvertently just prior to accident
(3) Air bag deployed, accident sequence undetermined
(4) Nondeployed
(5) Unknown if deployed
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(9) Unknown

23. Are There Indications of Air Bag System Failure? — 1
(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use — 4
(0) None used
(1) Police did not indicate restraint use
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt used, type not specified
(6) Child safety seat
(7) Other or automatic restraint (specify): _____
(8) Restrained, type unknown
(9) Police indicated "unknown"

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position: 4
    - (0) No head restraints
    - (1) Integral—no damage
    - (2) Integral—damaged during accident
    - (3) Adjustable—no damage
    - (4) Adjustable—damaged during accident
    - (5) Add-on—no damage
    - (6) Add-on—damaged during accident
    - (8) Other (specify): _____
    - (9) Unknown

26. Seat Type (this Occupant Position): 02
    - (00) Occupant not seated or no seat
    - (01) Bucket
    - (02) Bucket with folding back
    - (03) Bench
    - (04) Bench with separate back cushions
    - (05) Bench with folding back(s)
    - (06) Split bench with separate back cushions
    - (07) Split bench with folding back(s)
    - (08) Pedestal (i.e., column supported)
    - (09) Other seat type (specify): _____
    - (10) Box mounted seat (i.e., van type)
    - (99) Unknown

27. Seat Performance (this Occupant Position): 1
    - (0) Occupant not seated or no seat
    - (1) No seat performance failure(s)
    - (2) Seat adjusters failed
    - (3) Seat back folding locks or "seat back" failed (specify): _____
    - (4) Seat track/anchors failed
    - (5) Deformed by impact of occupant
    - (6) Deformed by passenger compartment intrusion (specify): _____
    - (7) Combination of above (specify): _____
    - (8) Other (specify): _____
    - (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0
(000) No child safety seat
Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify):
_____
(998) Unknown make/model
(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat
(7) Other type child safety seat (specify):
_____
(8) Unknown child safety seat type
(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0
(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(08) Other orientation (specify):
_____
(09) Unknown orientation

Designed For Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):
_____
(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):
_____
(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 0

32. Child Safety Seat Shield Usage 0 0

33. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA31-OA33.
(00) No child safety seat

Not Designed With Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 4

(0) O - No injury
(1) C - Possible injury
(2) B - Nonincapacitating injury
(3) A - Incapacitating injury
(4) K - Killed
(5) U - Injury, severity unknown
(6) Died prior to accident
(9) Unknown

35. Treatment - Mortality 1
(0) No treatment
(1) Fatal
(2) Fatal - ruled disease (specify):

_____

Nonfatal
(3) Hospitalization
(4) Transported and released
(5) Treatment at scene - nontransported
(6) Treatment later
(8) Treatment - other (specify):

_____
(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2
(0) Not treated at a medical facility
(1) Trauma center
(2) Hospital
(3) Medical clinic
(4) Physician's office
(5) Treatment later at medical facility
(8) Other (specify):

_____
(9) Unknown

37. Hospital Stay 00
(00) Not Hospitalized
____Code the number of days (up through 60) that the occupant stayed in hospital.
(61) 61 days or more
(99) Unknown

38. Working Days Lost 62
____Code the number of days (up through 60) that the occupant lost from work due to the accident
(00) No working days lost
(61) 61 days or more
(62) Fatally injured
(97) Not working prior to accident
(99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER

39. Time to Death 03
3:16 ___Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 +n up through 30 days = 60)
(00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

40. 1st Medically Reported Cause of Death 05

41. 2nd Medically Reported Cause of Death 06

42. 3rd Medically Reported Cause of Death 02
____Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
(00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

_____
(97) Other result (includes fatal ruled disease) (specify):

_____
(99) Unknown

43. Number of Recorded Injuries for This Occupant 12
12 Code the actual number of injuries recorded for this occupant.
(00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

AUTOMATIC BELT SYSTEM

44. Automatic (Passive) Belt System Availability/ Function 0
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional
(4) Automatic belts destroyed or rendered inoperative
(9) Unknown

45. Automatic (Passive) Belt System Use 0
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):

(3) Automatic belt use unknown
(9) Unknown

46. Automatic (Passive) Belt System Type 0
(0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
(3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):
(9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify):

(9) Unknown

49. Seat Orientation (this Occupant Position) 1
(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify):

(9) Unknown

Check the Primary Source Used In Determining Belt Use.

[ ] Not equipped/not available/destroyed or rendered inoperative
[✓] Vehicle inspection
[ ] Official injury data
[ ] Driver/occupant interview
[ ] Other (specify):

[ ] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION? NO [ ] YES [✓]

UPDATE CANDIDATE? NO [✓] YES [ ]

STOP – VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER

TRAUMA DATA

50. Glasgow Coma Scale (GCS) Score (at Medical Facility) 03
    (00) Not injured
    (01) Injured - not treated at medical facility
    (02) No GCS Score at medical facility
    (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
    (97) Injured, details unknown
    (99) Unknown if injured

51. Was the Occupant Given Blood? 1
    (1) No - blood not given Lots of IVs but no blood
    (2) Yes - blood given (specify units):
    (9) Unknown if blood given

52. Arterial Blood Gases (ABG) – HCO_3 19
    (00) Not injured
    (01) Injured, ABGs not measured or reported
    (02-50) Code the actual value of the HCO_3
    (96) ABGs reported , HCO_3 unknown
    (97) Injured, details unknown
    (99) Unknown if injured

Base Excess -11.2

BELT USE DETERMINATION

53. Primary Source of Belt Use Determination 1
    (0) Not equipped/not available/destroyed or rendered inoperative
    (1) Vehicle inspection
    (2) Official injury data
    (3) Driver/occupant interview
    (8) Other (specify):
    (9) Unknown if belt used

Appendix I:

NASS CDS Occupant Injury Form:

Case Vehicle Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 01
4. Occupant Number: 01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

		Source of Injury Data	A.I.S. - 90 Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
Concussion	1st	5. 3	6. 1	7. 6	8. 08	9. 24	10. 5	11. 0	12. 23	13. 2	14. 1	15. 99
Contusions (L) hemisphere	2nd	16. 1	17. 1	18. 4	19. 06	20. 12	21. 3	22. 2	23. 23	24. 2	25. 1	26. 99
Intraventricular hemorrhage	3rd	27. 1	28. 1	29. 4	30. 06	31. 78	32. 4	33. 9*	34. 23	35. 2	36. 1	37. 99
Subarachnoid hemorrhage (R)	4th	38. 1	39. 1	40. 4	41. 06	42. 84	43. 3	44. 1	45. 23	46. 2	47. 1	48. 99
Subarachnoid hemorrhage (L)	5th	49. 1	50. 1	51. 4	52. 06	53. 84	54. 3	55. 2	56. 23	57. 2	58. 1	59. 99
Laceration (L) hemisphere	6th	60. 1	61. 1	62. 4	63. 06	64. 88	65. 4	66. 2	67. 23	68. 2	69. 1	70. 99
Laceration spleen	7th	71. 1	72. 5	73. 4	74. 42	75. 24	76. 3	77. 2	78. 21	79. 2	80. 1	81. 99
Depressed (L) Vault Fx	8th	82. 1	83. 1	84. 5	85. 04	86. 04	87. 3	88. 2	89. 23	90. 2	91. 1	92. 99
Basilar Skull Fx posterior Fossa	9th	93. 1	94. 1	95. 5	96. 02	97. 00	98. 3	99. 8	100. 23	101. 2	102. 1	103. 99
Abrasion lower lip	10th	104. 1	105. 2	106. 9	107. 02	108. 02	109. 1	110. 8	111. 45	112. 1	113. 1	114. 00

*

OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90 Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
Bruising Face 11th	6	2	9	04	02	1	9	45	2	1	00
Bruising (1) chest 12th	6	4	9	04	02	1	2	41	2	1	00
13th	—	—	—	— —	— —	—	—	— —	—	—	— —
14th	—	—	—	— —	— —	—	—	— —	—	—	— —
15th	—	—	—	— —	— —	—	—	— —	—	—	— —
16th	—	—	—	— —	— —	—	—	— —	—	—	— —
17th	—	—	—	— —	— —	—	—	— —	—	—	— —
18th	—	—	—	— —	— —	—	—	— —	—	—	— —
19th	—	—	—	— —	— —	—	—	— —	—	—	— —
20th	—	—	—	— —	— —	—	—	— —	—	—	— —
21st	—	—	—	— —	— —	—	—	— —	—	—	— —
22nd	—	—	—	— —	— —	—	—	— —	—	—	— —
23rd	—	—	—	— —	— —	—	—	— —	—	—	— —
24th	—	—	—	— —	— —	—	—	— —	—	—	— —
25th	—	—	—	— —	— —	—	—	— —	—	—	— —

XX1 = Original Medical Facility XX2 = Trauma Center (Life Flight) A = AUTOPSY

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

On arrived he was in driver's seat trapped in the vehicle with the dash and driver's door pining him in the vehicle (ET1)

• Steering wheel wrapped around pt's chest (ET2)

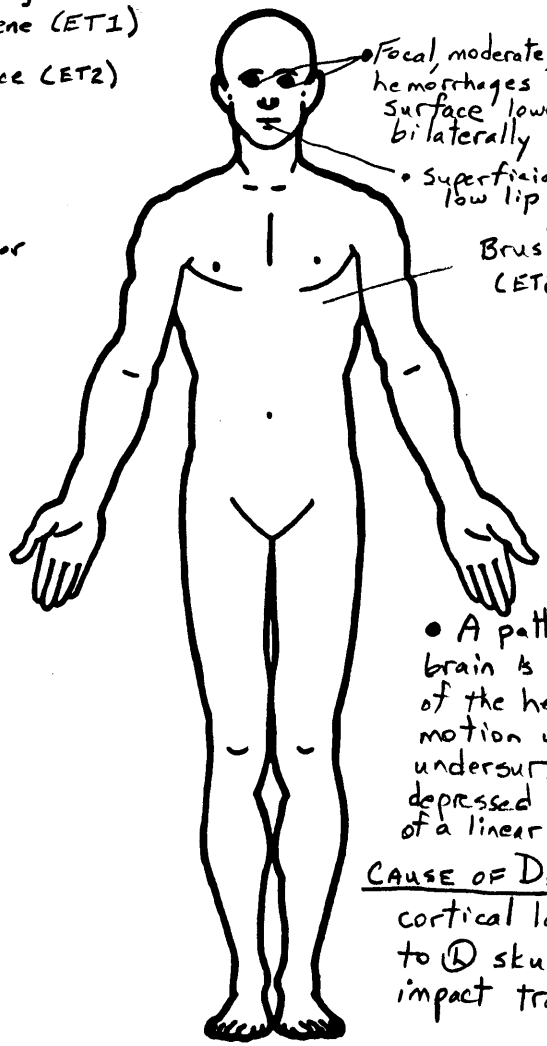
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

• Dried blood on face (NN1, ET1)
• Mild bleeding from mouth @ scene (ET1)
• Bruising face (ET2)

• No obvious open lacerations to skull (HP1)

• Blood/active bleeding from back of head (NN1, HP1, ET1, ET2, EN2)

• Lacerations to back of head (EN2)



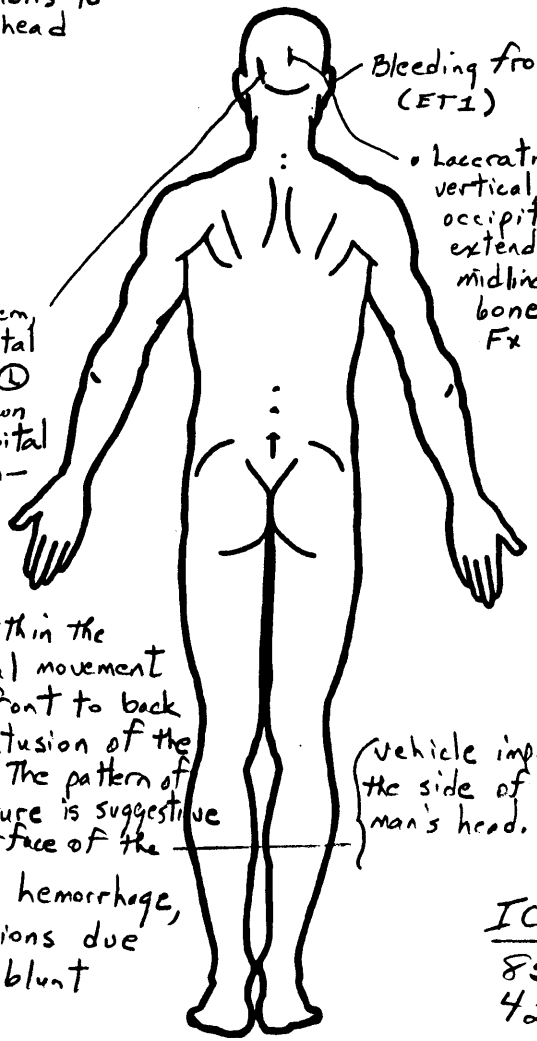
• Focal, moderate, petechial hemorrhages on mucosal surface lower eyelids bilaterally (A)
• superficial abrasion midline low lip (A)

• Redness noted across anterior chest (ET1)

Bruising (L) chest (ET2)

• No bruises seen (EN2)

• Laceration, 4.8cm, vertical (L) occipital scalp, posterin to (L) ear extending down to underlying occipital skull region (compound Fx) (A)



Bleeding from (R) ear (ET1)

• Laceration, 3.5cm, vertical, midline occipital region extending down to midline occipital bone — related to Fx (A)

• A pattern of contusions within the brain is suggestive of an axial movement of the head and brain in a front to back motion with subsequent contusion of the undersurface of the brain. The pattern of depressed indented skull fracture is suggestive of a linear portion of the inner surface of the

vehicle impacting with the side of this young man's head. (A)

CAUSE OF DEATH: subarachnoid hemorrhage, cortical laceration and contusions due to (L) skull fracture due to blunt impact trauma (A)

ICD-9-CM
854.05 (ER1)
427.5 (ER1, ER2)

• Extrication ~40 minutes (EN2)

SOURCE OF INJURY DATA

OFFICIAL

(1) Autopsy records with or without hospital/medical records
(2) Hospital/medical records other than emergency room (e.g., discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL

(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify):

_____

(9) Police

INJURY SOURCE

FRONT

(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub/spoke
(06) Steering wheel (combination of codes 04 and 05)
(07) Steering column, transmission selector lever, other attachment
(08) Add on equipment (e.g., CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Glove compartment door
(13) Knee bolster
(14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
(15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
(16) Driver side air bag compartment cover
(17) Passenger side air bag compartment cover
(18) Windshield reinforced by exterior object (specify):_____
(19) Other front object (specify):

_____

LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests
(21) Left side hardware or armrest
(22) Left A (A1/A2)-pillar
(23) Left B-pillar
(24) Other left pillar (specify):

_____

(25) Left side window glass or frame
(26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(27) Other left side object (specify):

_____

(28) Left side window sill

RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests
(31) Right side hardware or armrest
(32) Right A (A1/A2)-pillar
(33) Right B-pillar
(34) Other right pillar (specify):

_____

(35) Right side window glass or frame
(36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(37) Other right side object (specify):

_____

(38) Right side window sill

INTERIOR

(40) Seat, back support
(41) Belt restraint webbing/buckle
(42) Belt restraint B-pillar or door frame attachment point
(43) Other restraint system component (specify):_____
(44) Head restraint system
(45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
(46) Other occupants (specify):

_____

(47) Interior loose objects
(48) Child safety seat (specify):

_____

(49) Other interior object (specify):

_____

ROOF

(50) Front header
(51) Rear header
(52) Roof left side rail
(53) Roof right side rail
(54) Roof or convertible top

FLOOR

(56) Floor (including toe pan)
(57) Floor or console mounted transmission lever, including console
(58) Parking brake handle
(59) Foot controls including parking brake

REAR

(60) Backlight (rear window)
(61) Backlight storage rack, door, etc.
(62) Other rear object (specify):

_____

EXTERIOR of OCCUPANT'S VEHICLE

(65) Hood
(66) Outside hardware (e.g., outside mirror, antenna)
(67) Other exterior surface or tires (specify):_____
(68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

(70) Front bumper
(71) Hood edge
(72) Other front of vehicle (specify):

_____

(73) Hood
(74) Hood ornament
(75) Windshield, roof rail, A-pillar
(76) Side surface
(77) Side mirrors
(78) Other side protrusions (specify)

_____

(79) Rear surface
(80) Undercarriage
(81) Tires and wheels
(82) Other exterior of other motor vehicle (specify):

_____

(83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

(84) Ground
(85) Other vehicle or object (specify)

_____

(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle
(91) Flying glass
(92) Other noncontact injury source (specify):_____
(93) Air bag exhaust gases
(97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

Body Region

(1) Head
(2) Face
(3) Neck
(4) Thorax
(5) Abdomen
(6) Spine
(7) Upper Extremity
(8) Lower Extremity
(9) Unspecified

Type of Anatomic Structure

(1) Whole Area
(2) Vessels
(3) Nerves
(4) Organs (includes muscles/ligaments)
(5) Skeletal (includes joints)
(6) Head - LOC
(9) Skin

Specific Anatomic Structure

Whole Area
(02) Skin - Abrasion
(04) Skin - Contusion
(06) Skin - Laceration
(08) Skin - Avulsion
(10) Amputation
(20) Burn
(30) Crush
(40) Degloving
(50) Injury - NFS
(90) Trauma, other than mechanical

Head - LOC
(02) Length of LOC
(04, 06, 08) Level of Consciousness
(10) Concussion

Spine
(02) Cervical
(04) Thoracic
(06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

Aspect

(1) Right
(2) Left
(3) Bilateral
(4) Central
(5) Anterior
(6) Posterior
(7) Superior
(8) Inferior
(9) Unknown
(0) Whole region

OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

__ No

✓ Yes

(NN1, HP1, ET2, A)

Blood Alcohol Level (mg/dl)

BAL = 00

(ER2, A)

Glasgow Coma Scale Score

GCSS = 3

(NN1, ET2

(ET1) 5

Units of Blood Given

Units = ____

Arterial Blood Gases

pH = 7.08

PO_2 = 178.0

PCO_2 63.4

HCO_3 19.1

Base Excess −11.2 (ER1)

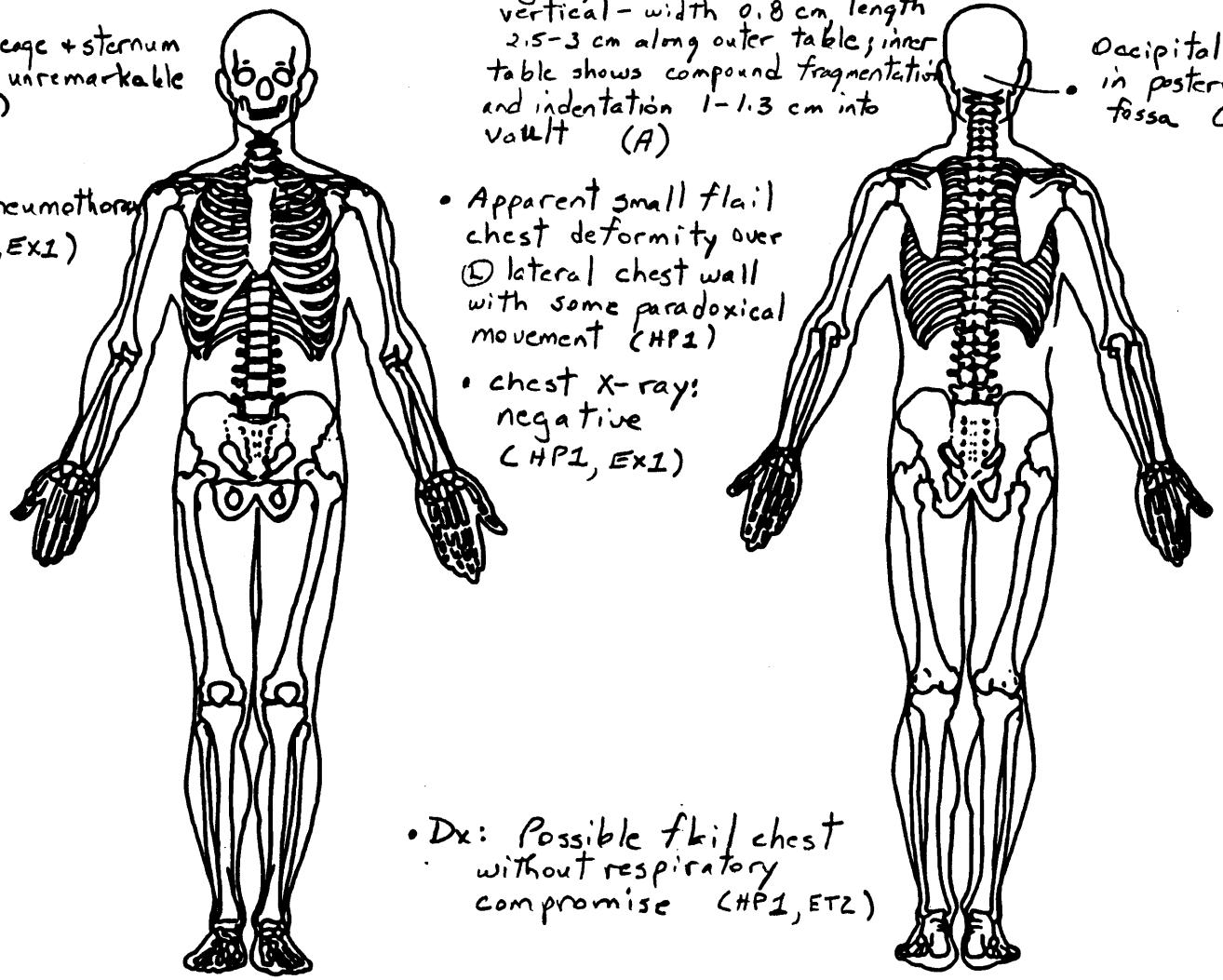
Height 6'2" = 188 cm (A)

Weight

180 lbs = 82 kg	178 lbs = 81 kg
(ET2	A)

Air Bag deployed (NN1, HP1, ET2)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



- Rib cage + sternum are unremarkable (A)
- no pneumothorax (NN1, EX1)
- Open Fx (L) parietal-occipital region, linear, indented, depressed, vertical-width 0.8 cm, length 2.5-3 cm along outer table; inner table shows compound fragmentation and indentation 1-1.3 cm into vault (A)
- Apparent small flail chest deformity over (L) lateral chest wall with some paradoxical movement (HP1)
- chest X-ray: negative (HP1, EX1)
- Occipital midline Fx in posterior cranial fossa (A)
- Dx: Possible flail chest without respiratory compromise (HP1, ET2)

OFFICIAL INJURY DATA — INTERNAL INJURIES

- Marked nonpurposeful movement of arms + legs @ scene + in ER (NW1)
- Does not move extremities spontaneously (HP1)

indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

- Pupils dilated + nonreactive to light @ scene (HP1, ET1, ET2)
- Pupils 2mm + nonreactive during lifeflight (ET2)
- Small to moderate intraventricular hemorrhage in (R)+(L) lateral horns of 3rd ventricle (A)
- Mild petechial hemorrhages near apex of heart on epicardial surface (A)
- Unresponsive in ER to verbal + painful stimuli (HP1, ET2)
- Mild to moderate subarachnoid hemorrhage on lateral (L)+(R) cerebral hemispheres
- (L) Brain laceration (cortical disruption), 3.5 x 2.5 cm, parietal temporal lobes underlying indented Fx in (L) parietal-occiptal (A)
- Markedly dilated stomach (EX1)
- Small laceration in hilum of spleen with 250cc of hemoperitoneum (A)
- Unconscious with decorticate posturing in response to painful stimuli @ scene (ET1)
- Superficial + deep cortical contusions within the inferior portions of (L) frontal, temporal, + parietal lobes (A)
- Posterior mediastinal hemorrhage — believed associated with a needle-like fenestration of the parietal pleura of the (L) upper anterior chest between the (L) 1st + 2nd ribs underlying a plastic catheter placement on skin (A)
- (L) hemothorax ~ 1000 ccs — associated with fenestration (A)
- Cardiac arrest when placed on Life flight helicopter to transport to Trauma Center (HP1, HP2)
- Dx: Severe head injury (NW1, HP1, EN2, HP2)
- Probable uncal herniation (brain stem) during time which precipitated his cardiovascular collapse (HP1)
- Brain stem unremarkable (A)

Hospital Medical Records

{Initial Treatment Facility}

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HOSPITAL

ADMISSION

PATIENTS LAST NAME	FIRST NAME	MIDDLE NAME	MAIDEN NAME	BIRTH DATE	AGE	COST CENTER	ROOM-BED	ADM
[redacted]				[redacted]	23Y			

STREET ADDRESS	RR OR BOX NO	CITY	STATE	ZIP	TELEPHONE NO	RELIGION	OCCUPATION
[redacted]			KY [redacted]		[redacted]	OTHER	

SOC. SEC. NO	SEX	RACE	MARITAL STATUS	COUNTY	PT CL	TYPE PT	FSC	CYCLE CODE
[redacted]	M	W		[redacted]		02	05	

ADMISSION DATE & TIME	DISCHARGE DATE & TIME	DAYS STAY	ATTENDING PHYSICIAN		CONSULTING PHYSICIAN
[redacted] 94 [redacted]			[redacted]	[redacted]	

NEXT OF KIN	RELATIONSHIP	ADDRESS	TELEPHONE	MEDICARE OR MEDICAID NO
[redacted]				

READMIT CODE	ADMISSION DATE	CLERK	PATIENTS EMPLOYER	EMPLOYERS ADDRESS	EMPLOYER'S CODE
		[redacted] OTHER		[redacted]	

NOTIFY IN EMERGENCY	RELATIONSHIP	GUARANTOR OF ACCOUNT	ADDRESS	TELEPHONE
	SELF			

INSURANCE

1	M'CARE	MEDICARE NO.	PART ☐ A ☐ B	NAME AS APPEARS ON MEDICARE CARD	EFF. DATE
2	M'CAID	MEDICAID NO.	VALID CARD SEEN	CASE NAME	EFF. DATE
3	BLUE CROSS	I.D. OR CERT. NO.	GROUP #	SUBSCRIBER	REL. TO PT
4	COM'L INS.	POLICY NO. [redacted]	INS. CARRIER AND ADDRESS OTHER COMMERICAL INSURANC	SUBSCRIBER [redacted]	REL. TO PT Ins.
5	WORK COMP		EMPLOYER AT TIME OF ACCIDENT	ADDRESS	DATE OF INJURY
6	OTHER	MVA			

CURRENT HISTORY

PATIENT HEALTH DATA

Y	COR	N
Y	RESP	N
Y	NEUR	N
Y	DM	N
Y	PREG	N
Y	BP	N
Y	GU	N
Y	MED	N
Y	RX	N

MODE OF ARRIVAL: Self / Ambulance

ADMITTED PER: Walk / W/C / Cart / Carried

ALLERGIES ______

T ____ P ____ B/P ________ WT. ______

COMMENTS: ______

ARRIVED AT ____________ DEPT. AT ____________ AM/PM
HOW PT. TOLERATED PROCEDURE ____________
DISCHARGED AT ____________ AM/PM
SIGNATURE:

ARRIVED AT ____________ DEPT. AT ____________ AM/PM
HOW PT. TOLERATED PROCEDURE ____________
DISCHARGED AT ____________ AM/PM
SIGNATURE:

ARRIVED AT ____________ DEPT. AT ____________ AM/PM
HOW PT. TOLERATED PROCEDURE ____________
DISCHARGED AT ____________ AM/PM
SIGNATURE:

ARRIVED AT ____________ DEPT. AT ____________ AM/PM
HOW PT. TOLERATED PROCEDURE ____________
DISCHARGED AT ____________ AM/PM
SIGNATURE:

TIME OF DISCHARGE: ____________ AM/PM   DISCHARGED VIA: ( ) WALK ( ) W/C ( ) CART ( ) CARRIED

MODE OF DISCHARGE ( ) SELF ( ) AMBULANCE

DISCHARGE INSTRUCTIONS

854.05

427.5

PATIENT SIGNATURE ____________

PRE-HOSPITAL CARE Head Immob

- ☑ O2 — LM — NC & ~~MASK~~ (circled)
- ☑ Airway
- ☐ ET Tube
- ☑ Ambu
- ☐ Home Care
- ☐ CPR
- ☑ Monitor
- ☐ Mast Suit
- ☐ Not Applicable
- ☑ Spineboard
- ☐ Field IV Solution ________
- Amt Infused ________ Site ____
- ☐ Splint RA LA RL LL
- ☑ C-Collar

Physician: [redacted] Room Number (1) 2 3 4

Date: [redacted]/94 Triage time [redacted]

Brought by ☐ Self ☐ Family ☑ Ambulance ☐ Other

Priority Class: (I) II III IV

Age: 23 Sex: M DOB [redacted] LNMP: NA Pregnant: Y/(N)

Allergies: NKMA

Tetanus Injection within last 5 years Y N Unknown

Chief Complaint: MVA c̄ MASSIVE Head Injury

Past Medical History: None Significant – Healthy

Home Meds: None

CONTINUING ASSESSMENT/INTERVENTIONS/EVALUATIONS

TIME	S_aO_2	TEMP	P	R	BP	NSG DX#
0925	97	—	197	BVM	195/91	
0935	99	—	184	Bag tube	166/69	
0943	100		169	Bag tube	240/117	

Driver in head on MVA. Restrained. Air bag deployed. Had to be extricated c̄ jaws. Unable to intubate or get IV line at accident due to marked non-purposeful movement of arms + legs. Face c̄ dried blood coverage. Fresh blood/active bleeding noted. Log roll c̄ head immobilization in place. No injury noted on back. Bleeding coming from back of head. S.S. here c̄ family. Family (grandparents) counciled about [illegible] for transfer. Mother per telephone. See ethics notes.

MEDICATION AND PROCEDURE DOCUMENTATION

TIME & INITIALS	MEDICATION/PROCEDURES	DOSE	ROUTE	SITE	RESPONSE	TIME & INITIALS	IV STARTED	SIZE	FLUID	# OF STICKS
0925 [redacted]				Rt. AC		(IV) IID	LR	16ga	KVO	1
0925 [redacted]				LT FA		(IV) IID	NS	16gA	KVO	1
0940 [redacted]	16Fr. F/C inserted c̄ drg of clear yellow urine [illegible]									
0930 [redacted]	Intubated c̄ 7.5 ET									
						INTAKE		OUTPUT		
						CHEMSTICK				

IDENTIFY INITIALS BY SIGNATURE AND TITLE

1 [redacted] 2 [redacted] EMT-P 3 [redacted] RN 4

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NURSING ASSESSMENT/DATA BASE
FILL IN OR CIRCLE APPROPRIATE TO CHIEF COMPLAINT

PEDIATRIC

WT: IMMUNIZATIONS UP TO DATE Y N
AFFECT:
DEVELOPMENTALLY APPROPRIATE FOR AGE Y N
IF NO, DESCRIBE

VENTILATION

RESPIRATIONS: Regular Shallow Labored Retractions Absent.
BREATH SOUNDS: Clear Crackles Coarse Wheezes Expir-Inspir
Assisted c BVM @ 100%
COUGH: Y-N Productive Y-N Sputum
NOT APPLICABLE ? Flail chest.

CIRCULATION

SKIN TYPE: (Warm) Cool (Dry) Moist Other
SKIN COLOR: (Normal) Cyanotic Pale Other
NAILBEDS: (Pink) Cyanotic Capillary Refill ± Other
EDEMA: Absent Pedal Other — PULSES Radial Right (Y)-N Left (Y)-N; Pedal Right (Y)-N Left (Y)-N

COGNITION COMMUNICATION

NEUROLOGICAL: Glasgow Coma Scale E 1 M 1 V 1 Total 3
Description Restless Flailing arms + legs non purposeful
SPEECH: Clear Slurred Rambling Aphasic NA
BEHAVIOR: Cooperative Uncooperative Confused Unresponsive (Restless) Combative Crying Anxious Other
NOT APPLICABLE

MOBILITY COMFORT

SKIN INTEGRITY: Burns Bruises (Laceration) Abrasion Rash Decubitus
Description Lacs ? Bleeding area Back of head - unable
PAIN: Location to visualize due to condition
Quality/Duration/Pattern
Motion/Sensation
Additional Comments
GAIT: Steady Unsteady Unable

NUTRITION FLUID STATUS ELIMINATION

Nausea Vomiting Diarrhea Constipation
Bowel Sounds — Skin Turgor — Mucous Membranes —
Bleeding Source
Dysuria Hematuria Describe
NOT APPLICABLE
F/C inserted clear yellow urine

GLASCOW COMA SCALE

EYE OPENING	MOTOR RESPONSE		VERBAL RESPONSE	
4-Spontaneous	6-Obeys Commands	3-Flexion	5-Oriented	3-Inappropriate Words
3-To Speech	5-Localizes Pain	2-Extension	4-Confused Conversation	2-Incomprehensible Sounds
2-To Pain	4-Withdraw	1-None		1-None
1-None				

#	NURSING DIAGNOSIS	INITIAL INTERVENTION
(1)	INEFFECTIVE AIRWAY CLEARANCE	(AIRWAY
(2)	INEFFECTIVE BREATHING PATTERNS	OXYGEN
(3)	IMPAIRED GAS EXCHANGE	MONITOR
		ALARMS ON
		MONITOR V S
(4)	ALTERED CARDIAC OUTPUT	NIBP MONITOR)
(5)	ALTERED TISSUE PERFUSION	
(6)	IMPAIRED VERBAL COMMUNICATION	ALLERGY BAND ON
(7)	SENSORY/PERCEPTUAL ALTERATIONS	
(8)	ALTERED THOUGHT PROCESSES	SIDERAILS UP
(9)	POTENTIAL FOR INJURY	CALL BELL IN REACH
10	ANXIETY/FEAR	SOFT RESTRAINTS
11	POTENTIAL FOR VIOLENCE SELF-	
12	DIRECTED OR DIRECTED AT OTHERS	
		ICE
13	IMPAIRED PHYSICAL MOBILITY	ELEVATION
14	PAIN ACUTE OR CHRONIC	SLING/SPLINT
15	IMPAIRED TISSUE INTEGRITY	(C-SPINE IMMOBILIZATION)
16	POTENTIAL FOR INFECTION	POSITION OF COMFORT
		WOUND CLEANSED
		DRESSING
(17)	FLUID VOLUME DEFICIT EXCESS POTENTIAL FOR RT ? Hemorrhage	
18	CONSTIPATION/DIARRHEA	NPO
19	ALTERATION IN URINARY ELIMINATION	I&O
20	HYPOTHERMIA/HYPERTHERMIA	THERMAL MEASURES
21	IMPAIRED HOME MAINTENANCE MANAGEMENT	PAD COUNT
		HEME TEST •
22	ALTERED FAMILY PROCESSES	SOURCE
23	INEFFECTIVE COPING	
24	NONCOMPLIANCE (SPECIFY)	SOCIAL WORKER CALLED
25	SELF CARE DEFICIT	
(26)	POST TRAUMA RESPONSE	(CRISIS CALLED)
	TIME SIGNATURE	

DISCHARGE - TRANSFER ASSESSMENT - FILL IN OR CIRCLE WHERE APPROPRIATE RELATIVE TO FINAL DIAGNOSIS

BREATH SOUNDS Rt chest - Decompression needle
RESPIRATIONS Regular Shallow Labored Retractions
CARDIAC MONITOR PATTERN unstable
Right Left Heavily Flexed at
PULSES Radial Y-N Y-N Edema
Pedal Y-N Y-N Flail chest.
NEUROLOGICAL Glasgow Coma Scale E 1 M 1 V 1 Total 3
BEHAVIOR Cooperative Uncooperative Confused (Unresponsive) Restless Combative Crying Other
PAIN
SKIN (Warm Dry) Cool Moist (Normal) Pale Cyanotic Other
SKIN INTEGRITY Wounds unchanged
ASSESSMENT UNCHANGED

☐ Improved/Satisfactory ☐ Stable ☐ Guarded ✓ Critical
☐ DOA ☐ Expired
DISPOSITION AT TIME OF DISCHARGE
☐ Admit IP to Room — per wheelchair cart ambulatory
☐ Admit OP to Room — per wheelchair cart ambulatory
BELONGINGS
Old Records to Floor Yes - No
ADMISSION/TRANSFER IV— Oxygen — Monitor —
☐ Home/Nursing Home ☐ AMA
☐ Custody of Law Enforcement
✓ Transfer to [redacted] per ambulance family vehicle Life Flight
TIME SIGNATURE
[redacted]

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PHYSICIAN'S ED RECORD

PRESENT ILLNESS

PAST MEDICAL HISTORY:

PHYSICAL EXAM:

ORDERS						
LAB	☐ CBC ☐ PROFILE 7 ☐ MULTICHEM ☐ CARDIAC WORKUP ☐ ETOH ☐ DRUG SCREEN ☐ QUALITATIVE HCG	☐ UA ☐ DIGOXIN ☐ THEOPHYLLIN ☐ URINE PREGNANCY TEST ☐ URINE C&S ☐ THROAT C&S ☐ SPUTUM C&S	☐ STREP SCREEN ☐ MONOSPOT ☐ ______ ☐ ______ ☐ ______ ☐ ______ ☐ ______	CP	☐ ABG [checked/struck] ☐ EKG ☐ PULSE OX	☐ SKULL ☐ ____ RIBS ☐ KUB ☐ ABD - FLAT & UPRIGHT ☐ ______ ☐ ______ ☐ ______
				X-RAY	☐ CXR [checked] x 2 ☐ C-SPINE ☐ T-SPINE ☐ LS-SPINE	

TREATMENT

☐ CARDIAC MONITOR [checked] ☐ O_2 at ______ [checked] ☐ IID ☐ IVF of LR AT KVO CC/HR [checked]
☐ OTHER NS KVO

Pulse oximetry continuous —
G/C Entubate
Trauma Code No [redacted]

EVALUATION AND DIAGNOSIS

PLAN/DISPOSITION

DISCHARGE WITH INSTRUCTIONS ☐ ADMIT IP OP ☐ RELEASE BODY TO FUNERAL HOME OF FAMILY'S CHOICE
TRANSFER TO [redacted] SERVICES OF ________ PER ☐ AMBULANCE ☐ FAMILY CAR

DATE ________ PHYSICIAN SIGNATURE ________
CCH-314

[redacted]-94 ER NOTE

S: This patient is a 23 y/o white male who was brought into the ER by ambulance with paramedics after being involved in an automobile accident. He was the driver in one of the cars in a two car head-on collision. It was reported to me verbally by the paramedics that he had on both seat belt and an air bag which had deployed. He apparently sustained significant head injuries at the scene. Paramedics reported at the scene that his pupils were both dilated and non-reactive to light. When I examined him in the ER he was unresponsive. There was some bleeding from the back of the head from some apparently minor lacerations. He did not move any extremities spontaneously. Past medical history from his grandparents is that he was in generally good health, took no medications, and had no allergies.

O: Physical examination revealed a young white male who was unresponsive to both verbal and painful stimuli. He does not move extremities spontaneously.
HEENT: He is normocephalic. There is some minor bleeding from the posterior scalp. There were no obvious open lacerations to the skull. When I examined him initially his pupils were mid-position and unreactive. Doll's eyes were absent. Ears showed no otorrhea and no lacerations. Nose showed no rhinorrhea. Fundi was not well seen but appeared normal.
Neck: The patient was wearing a cervical collar which was not removed. There were no obvious lacerations on the neck on inspection through the collar.
Chest: There was an apparent small flail chest deformity over the left lateral chest wall with some paradoxical movement. However, chest x-ray was reviewed and I could not see this on repeat chest x-rays. His lung markings were visible out to the peripheral lung. He had good air movement through this area. No other chest abnormalities were noted. The lungs were clear to auscultation.
Heart: He initially had a regular rhythm without murmur, gallop, or rub.
Abdomen: Soft. Non-tender. There was no obvious guarding. Bowel sounds were present.
External Genitalia: Grossly normal.
Extremities: No obvious deformities. No lacerations or abrasions. No other abnormalities noted.
Skin: Warm and dry. No obvious lesions other than those noted above.
Neurological: He is unresponsive to verbal and tactile stimuli. There is no spontaneous movements of any extremities. He does not have any abnormal posturing.

A: 1. Severe head injury. 2. Possible flail chest without ventilatory compromise.

Course in the ER:
The patient was stabilized in the ER and readied for transport by air ambulance to [redacted] Hospital in [redacted], IN, where a neurosurgeon was awaiting his arrival. The patient was stable from a cardiovascular standpoint. Upon leaving the ER he was taken to the air ambulance pad and placed on board the helicopter. Shortly after placing him on the helicopter, before takeoff he had a cardiac arrest. He had several different rhythms including ventricular fibrillation and finally an EMD. Resuscitative efforts were carried out. Please see the CPR record for precise drugs, etc. A chest thoracentesis was performed without evidence of pneumothorax and it did not alter his course. Following multiple resuscitative efforts including repeated doses of IV Epinephrine including high dose IV Epinephrine and multiple defibrillations the patient was maintaining a very thready, weak pulse and a low blood pressure. It was felt at this point that we had nothing else that we could do to stabilize him at this facility and that his only hope for survival would be in transferring on to the hospital in [redacted] for further more intensive trauma support and neurosurgical support. This was in agreement among the members of the CPR team and he was transferred on in the helicopter to [redacted]. It was my impression that he probably herniated his brain stem during the time which precipitated his cardiovascular collapse.
IMPRESSION: 1. Severe head injuries. 2. Suspected uncal herniation. 3. Cardiac arrest secondary to #2.
PLAN: The patient was transferred in critical condition via helicopter with paramedic and a flight nurse in attendance to [redacted] Hospital. Even though the patient's condition was extremely critical I felt at this point we had no hope of any chance of survival if we kept him here and that his only hope would be transfer for further and more intense therapy.

[redacted]

DATE: _____ SIGNED: _____
GM/sb M.D.

[redacted]-94

HOSPITAL

EMERGENCY DEPARTMENT

CONTINUOUS CARE NOTES

TIME	VITAL SIGNS T	P	R	BP	PHYSICIAN'S ORDERS	NURSES/PHYSICIAN'S NOTES
5/13/94 0932 1025						Lifeflight crew here.
						Dr [redacted] here
						[redacted] RN
1005						Transferred to helicopter
						per cart in critical condition
						See Code Record
						[redacted] RN
1030						See Other Continuous Care
						note. [redacted] RN
1050						Lifted off in helicopter
						in critical condition.
						[redacted] RN
1055						Call to [redacted] Hospital
						ER. Report given to [redacted]
						[redacted] RN: Informed
						of pt family consent to
						organ donation [redacted] RN
1110						Copy of Code record
						faxed to [redacted]
						[redacted] RN
1345						returned telephone
						consent faxed to
						[redacted] ER [redacted] RN
5/13/94	Lab Entry.					Patient pupils unequal on
						Rt. dilated Left 5mm After
						intubation pupil check revealed
						Equal @ 3mm ē minimal reactivity.
						CXR s̄ pneumothorax [redacted] RN

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CODE RECORD

DATE: [redacted]94 TIME ARREST NOTED: 1012 BY WHOM? Staff

INITIAL ASSESSMENT:

Respirations: Rate: Intubated Quality: _____

? Circulation: Palpable pulse rate: 40 Blood Pressure: _____

TRC/IL Monitor Rate: ~~Bradycardia~~ 40 Rythm: Bradycardia

Ectopy: _____ Skin Color: Pink

INITIAL RESUSITATION:

Started By: Paramedic/Staff Time: 1012

Precordial Thump: YES ✓ NO _____

Mouth to Mouth Started: Time: _____ By Whom? _____

Bag/Valve/Mask Unit: Time: Intubated Prior to Code

External Cardiac Massage: Time: [redacted] EMT-P By Whom? 1013

NOTIFICATIONS:

MD Notified: Name: [redacted] Time: 1012

By Whom? _____

MD Arrived: Time: @ hospital

Family Notified: Name: @ hospital Time: 1014

By Whom? [redacted] SS/DP

Nurse's Signature [redacted] RN [redacted]

Doctor's Signature _____

HOSPITAL

EMERGENCY DEPARTMENT

CONTINUOUS CARE NOTES

[redacted] 94

TIME	VITAL SIGNS T	P	R	BP	PHYSICIAN'S ORDERS	NURSES/PHYSICIAN'S NOTES
1030						Spoke c pt grandparents. Explained severity of pt condition. Discussed organ donation. Call made to pt mother in [redacted]. Advised her of her sons condition. Asked her if she would like to donate organs if her son expired. Patients mother [redacted] consented to the donation of any of [redacted]'s organs if it was alright with Mr + Mrs [redacted] (Grandparents) Again spoke c patients grandparent who consent to organ donation as long as everything possible is done for [redacted] and there is no question that [redacted] is dead. Their consents were witnessed by myself, [redacted] CN and [redacted] SS/DP

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CODE FLOW SHEET

TIME	RYTHM	HEART RATE	BLOOD PRESSURE	CARDIOVERT	DEFIBRILLATE	ATROPINE	~~BRETYLLI~~ ~~MEDI~~ Epinephrine	CALCIUM CHLORIDE	DOPAMINE	ISUPREL	LIDOCAINE	~~PRONESTYL~~ Mag Sulfate	SODIUM BICARB	COMMENTS
1012	Brady ~~EMD~~	40					~~1~~ [illegible]							Pupils Blown
1013	V-Fib						1 Amp							
1017							1 Amp							
1019	EMD					1mg								
1021							1 Amp							
1022					200									No Pulse
1023					300	1mg								No Pulse
1024					360		1 Amp							
1025					360						100mg			No Pulse
1028							1 Amp							
1029					360		1 Amp							No Pulse
1030					360		1 Amp							No Pulse
1031														Needle Thoracic Chest Decompression
1032					360									No Pulse
1033												2gm		
1035	Weak Thready													External Pacemaker Setting 100/150
1044			60						Wide Open					

Nurse's Signatu[redacted] RN

Doctor's Signature ______________________

* All Medications are given IV unless otherwise indicated.

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DATE DRAWN	: [redacted]/94	HOSP #	[redacted]
TIME DRAWN	: 09:35	LOCATION	: LRI
TIME ANALYZED	: 09:39	AGE	: ( )
SAMPLE	: Arterial	PHYSICIAN:	
STUDY NO	: 1	DRAWN/ANALYZED BY:	[redacted]
SITE	: LR	MEDICAL RECORD #	
PATIENT TEMP	: 98.6°F		

	RESULTS		UNITS	NORMAL VALUES
PH	7.084	*		7.37 - 7.43
CO2 TENSION (PCO2)	63.4	*	MMHG	35 - 45
O2 TENSION (PO2)	178.0	*	MMHG	76 - 96 (ROOM AIR)
BICARBONATE (HCO3)	19.1	*	MEQ/L	23 - 27
BASE EXCESS (BE)	-11.2	*	MEQ/L	0 +/- 2.5
APPROX. ALV-ART O2 GRAD (CALC)	168.8		MMHG	< 20 (ROOM AIR)
O2 SATURATION (%O2HB)	98.7		%	> 94
HEMOGLOBIN	15.4		GM%	
CARBOXYHEMOGLOBIN	-0.1		%	0 - 3
METHEMOGLOBIN	0.1	*	%	0 - 3
O2 CONTENT	21.1		VOL%	16 - 24
O2 CAPACITY	21.4		VOL%	16 - 24

COMMENTS: EP
INSPIRED O2 60.0%
DEVICE Cannula LITER FLOW: 10.00
VENTILATOR SETTINGS:
VT PEEP AC
RR CPAP

COMPUTER INTERPRETATION

HYPEROXEMIA IS PRESENT WITH AN FIO2 OF 60.0%

THE PH IS IN THE EXTREMELY SEVERE ACIDEMIC RANGE

DUE TO A MODERATE ELEVATION IN THE CARBON DIOXIDE TENSION

THE BASE EXCESS IS MARKEDLY REDUCED

AND THE ... RANGE

COMBINED METABOLIC AND RESPIRATORY ACIDOSIS

SUMMARY OF MOST RECENT BLOOD GASES

DATE TIME		pH	PCO2	PO2	HCO3	BE	%O2HB	AaDO2	THB	COHB	METHB	O2CT
[redacted]92 09:35		7.084 *	63.4 *	178.0 *	19.1 *	-11.2 *	98.7	168.8	15.4	-0.1	0.1 *	21.1

X-RAY REQUEST

HOSPITAL

TRANSPORT	EXAMINATION REQUESTED					
☐ WALK	1) Chest					
☐ WC	2)					
☐ STRETCHER	3)					
☑ PORTABLE	4)					
BIRTHDATE	IS PATIENT PREGNANT OR POSSIBLY PREGNANT ☐ YES ☐ NO	AGE 23	SEX m	PREVIOUS RADIOLOGY STUDIES	ORDERING PHYSICIAN [redacted]	
☐ INPATIENT	ADMITTING DX: MVA			CHIEF COMPLAINT PERTINENT TO EXAM ORDERED:		
☐ OUTPATIENT						
☑ E.R. PATIENT	TECHNICIAN [redacted]	REQUESTED BY	PATIENT FILE NUMBER [redacted]	DATE OF SERVICE [redacted]94		

PORTABLE CHEST X-RAY IN AP VIEW: Two views of the chest shows no evidence of infiltrates or pneumothorax. No definite evidence of rib fracture is seen. A small portion of the apex is not included in the film. Heart size is within normal limits. There is no pleural effusion. There is marked dilatation of the stomach.

IMPRESSION: No acute infiltrates or pneumothorax seen. No evidence of rib fracture is demonstrated. Markedly dilated stomach.

[redacted] M.D. MD
RADIOLOGIST

[redacted]
TRANSCRIBED BY

[redacted]/94
DATE

X-RAY REQUEST REPORT

CHART COPY

MO [redacted] DAY [redacted] YR [redacted] PICK-UP LOCATION [redacted]

CO CODE (Incident) 028 | AMBULANCE SERVICE LICENSE # [redacted]

RUN # [redacted]

TIME (Military)	
Call Received	0838
Dispatch	0839
Arrive Scene	0844
Depart Scene	0913
Arrive Destination	0917
Return to Service	0917

MILEAGE RECORD (Odometer Reading)	
At Start	[redacted]
At Scene	[redacted]
At Destination	[redacted]
At Base	[redacted]

Highest Level of Care Provided (1 ALS 2 BLS 3 Convalescent): 2

NATURE OF RUN: Dispatch ☐ Transport ☐ 1 Emergency 2 Non-Emergency

VEH LIC # [redacted] VEH ID # [redacted]

RUN TYPE: 1 Scene to Ha… 2 Facility to Facility 3 Facility to Non-Facility 4 Scene to Other Ambul… 5 Scene to Air Ambulance 6 Air Ambulance 7 Other (Narr)

RUN COMPLETE: 1 Yes 2 No Pt Ref 3 No Trnsp POV 4 No Cancelled 5 No False Run 6 No Amb Avl 7 No Amb Ha 8 No CNL 9 No Coroner 0 No Other (Narr)

PATIENT'S NAME (First) [redacted] (MI) (Last)

ADDRESS [redacted] St

CITY [redacted] STATE Ky ZIP [redacted]

TELEPHONE [redacted] SEX 1 (1 M 2 F) DOB [redacted] AGE 23

DRIVER/ATTENDANT 1 [redacted] Certificate # [redacted]

DRIVER/ATTENDANT 2 [redacted]

DRIVER/ATTENDANT 3 [redacted]

DRIVER/ATTENDANT 4

EMERGENCY WARNING EQUIPMENT USED

	TO SCENE	FROM SCENE
LIGHTS	☒	☐
SIREN	☒	☐
NONE	☐	☐

VITAL SIGNS ☐ Could not be taken ☐ Not taken

Time	8:55		
BP	180/90		
Pulse	rapid		
Resp	> L		

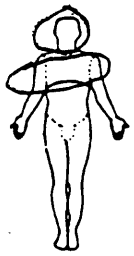
PATIENT'S ALLERGIES - MEDICAL ALERT ☐ None ☐ Unknown

PATIENT'S MEDICATIONS ☐ None ☐ Unknown

CHIEF COMPLAINT: Head injury

CASE NARRATIVE: 23 y/o ♂ involved in a two car head-on MVA. Upon our arrival he was in the drivers seat trapped in the vehicle c the dash & drivers door Pining him in the vehicle (Note the vehicle was damaged on the drivers side Front & down the drivers side including the door) PE- Unconscious response to Painful stimuli c decorticate posturing, skin W/D, Pupils-equal-dilated c the (R) side-slow to react, he has mod. bleeding From the back of his head, mild bleeding From his mouth, dryed blood around his (L) nostril ? bleeding From (R) Ear BS-bilateral MVT c Adventitious sounds Trachea-Midline, Noted redness across his, anterior chest VS 180/90-rapid-24 Deep. Rx: admin O2 @ 12 LPM by

INJURY AREA (Circle Location)



☐ Non Injury ☐ Apparent Fatality/Death Over

DESTINATION [redacted] Hospital REFERRING PHYSICIAN [redacted] RECEIVING PHYSICIAN [redacted] SIGNATURE OF RECEIVING FACILITY REP [redacted]

AID BEFORE ARRIVAL BY: 0
0 None 1 Family 2 Medical Aid 3 Citizen 4 Fire Dept 5 Police 6 Undetermined 7 Other (Narr)

AID ADMINISTERED BEFORE ARRIVAL: 0
0 None 1 First Aid 2 Extrication 3 CPR 4 ALS 5 Under 7 Other (Narr)

APPARENT NATURE CAUSE: 20

Medical	Injury (Type)	Other
01 Cardiac	11 Burn	31 Follow-up Care (Narr)
02 CVA	12 Choking	32 Undetermined
03 Diabetes	13 Drowning	33 Other (Narr)
04 Gen illness	14 Elec - Shock	
05 OB/GYN	15 Exposure - Cold	
06 Psych/Mental	16 Exposure - Hot	
07 Respiratory	17 Fall	
08 Seizure	18 Farm Mach Accident	
	19 Firearms	
	20 MVA	
	21 Motorcycle/Bike/ATV	
	22 Poisoning	
	23 Sports Related	

INJURY (Possible Factor): 0
0 NONE UNDETERMINED 1 Intox OD (See Back) 2 Assault 3 Rape 4 Homicide 5 Suicide 6 Haz Mat Incid 7 Other Narr

APPARENT INJURY: 08
01 Soft Tissue Injuries 02 Abrasion 03 Amputation 04 Asphyxia 05 Burn 06 Bite 07 Contusion 08 Head Injury 09 Fracture/Dislocation 10 Laceration 11 Puncture 12 Other Trauma 13 Undetermined 14 Other (Narr)

SAFETY DEVICE USED: 14
0 None Under 1 Seat Lap Belt 2 Child Restraint 3 Helmet 4 Air Bags

Glasgow CS	Time	Time
Eye Opening	845	
4 Spontaneous 3 Voice 2 Pain 1 None	1	
Best Verbal Rep		
5 Oriented 4 Confused 3 Inappro Words 2 Incomprehensive 1 None	1	
Best Motor Resp		
6 Obeys Cmmds 5 Purp Move 4 Withdraws 3 Flexes 2 Extends 1 None	3	
GCS Total		

PUPILS
☐ Equal ☐ Unequal ☒ R Dilated L ☐ R Light React L ☐ R Pinpoint L ☐ R Fixed L ☐ R Blind ☐ Other slow

TRANSPORT POSITION: 1
1 Supine 2 Prone 3 Semi-Sitting 4 Sitting 5 On-Side 6 Other (Narr)

TREATMENT PROCEDURE ☐ None

BLS/CONVALESCENT

	Treat	Staff
01 Art Airway Establ		
02 Art Respiration		
03 Baby Delivered		
04 Bag Mask Resus		
05 Bleeding Con		
06 Burn Treatment		
07 C-Collar Applied		
08 Cold Hot Applied		
09 CPR		
10 Dressing Applied		
11 Extrication		
12 Immobilization		
13 Irrigation		
14 Long Bd/Scoop		
15 MAST		
16 Oxygen Admin LPM =		
17 Restraints		
18 Short Bd/KED		
19 Splinting		
20 Suction		
21 Transport Only		
22 Vomiting Induced		
23 Other (Narr)		

ALS Treatment:
24 Blood Drawn 25 Defibrillated 26 Drug Admin 27 Intubation 28 IV Admin 29 Monitor EKG 30 Other (Narr)

EHS-8A (2/91)

COPY DISTRIBUTION—Original-Ambulance Service—1st Copy-Hospital ER—2nd Copy-State EMS—3rd Copy-County …

[redacted]

PATIENT TRANSFER AND REFERRAL FORM

Please attach a complete copy of the patient's chart and copies of any labwork results and any x-rays obtained.

[redacted]

PATIENT'S NAME [redacted] SS# [redacted] AGE 23.

ADDRESS [redacted] St. [redacted] Ky [redacted]
street city state zip county

PHONE [redacted] DATE OF BIRTH [redacted]

RELATIVE INFORMATION:
NAME AND RELATIONSHIP TO PATIENT [redacted] (Grandfather

ADDRESS [redacted] St. PHONE [redacted]

INSURANCE INFORMATION (PLEASE INCLUDE NAME OF COMPANY AND POLICY #)

REFERRING MD (FULL NAME) Dr. [redacted]

RECEIVING MD Dr. [redacted] RECEIVING INSTITUTION [redacted]

PATIENT MEDICAL HISTORY:
ALLERGIES NKMA.

MEDICATIONS None

BRIEF SUMMARY OF CURRENT MEDICAL PROBLEMS:
Multi Trauma c Severe Head Injury
MVA Head on - c Seat Belt

BRIEF SUMMARY OF TREATMENT GIVEN TO PATIENT PRIOR TO TRANSFER:
2 16 ga IV lines <R + NS
FC #16
ET

SIGNIFICANT PAST MEDICAL HISTORY:
? Hx Sundowning Health problems
per Grandparents.

Keep yellow copy. Send white and pink with the patient.

PHYSICIAN'S CERTIFICATE OF TRANSFER

I hereby certify that, based on the information available to me at the time of transfer, the medical benefits reasonably expected from the provision of appropriate medical care at another medical facility outweigh the increased risk to the individual, and in the case of labor to the unborn child from effecting the transfer.

This certification is based on the following:

Benefits:
- ☑ Availability of specialized medical personnel and equipment required to meet the special medical needs of the patient or, in the event of pregnancy, unborn child.
- ☐ Availability of a hospital or special care bed
- ☐ Other _____

Risks: Development, during transport, of
- ☑ Shock ☑ Hemorrhage ☑ Hypertension
- ☑ Cardiac arrhythmias or arrest
- ☑ Respiratory difficulty or arrest
- ☑ Progression of presenting symptoms
- ☐ _____
- ☐ _____
- ☐ _____

☐ Delivery of infant during transport

Even if no other risk factors are present, all transfers have the inherent risks of traffic delays, accidents during transport, inclement weather, rough terrain or turbulence, and the limitation of equipment and personnel present in the vehicle.

Physician's Name _____ Date _____ Time _____

Physician's Signature _____

IF NO PHYSICIAN IS PRESENT:

Nurse's Name _____ Date _____ Time _____

Nurse's Signature _____

On verbal order of Dr. _____ received on (date) _____ Time _____

PHYSICIAN MUST COUNTERSIGN WITHIN 24 HOURS

****

CONSENT/REFUSAL TO TRANSFER

I understand that it is the opinion of the physician responsible for my care that the benefits of transfer outweigh the risks of transfer. I have been informed of the risks and benefits upon which this transfer is being recommended. I have considered these risks and benefits and:

☐ I hereby give permission to transfer to another facility and permission for treatment by Dr. [redacted] and/or his associates at _____ Hospital and in transit to that facility.

☐ I hereby refuse to be transferred to another facility and release the attending physician(s), nurses and Crittenden County Health Systems from liability for any consequences suffered as a result of my refusal to be transferred.

X [redacted] _____ _____

Patient or Responsible Person (relationship) Date Time

_____

Witness

Trauma Center Medical Records

{Facility to which Occupant was transported by Helicopter}

[redacted] Emergency Medical Treatment Record

Date [redacted] 94 T-# [redacted] Weight(#) 180lb (kg) 96 Sex: (M) F Age: 23 DOB [redacted]

Patient Name [redacted] Address [redacted] St [redacted] KY [redacted]

Street City/State Zip

Relative: Name [redacted] Relation: grandfather Phone # [redacted]

Address: as above Contacted: (Yes) No

Social Security # [redacted] Insurance Type/# [redacted]

Referring Agency [redacted] Hospital M.D. [redacted] Dgx mult. trauma

Receiving Agency [redacted] M.D. [redacted] Unit ER

COBRA Papers: (Yes) No Reason for Transfer: Care not available at [redacted]

Advance Directives: Yes (No) Personal Belongings: NONE

Time	Event
0815	WEATHER CHECK/ STAND BY
0857	DISPATCH
0910	LIFT-OFF
0930	LANDING
0935	ARRIVAL AT HOSPITAL SCENE
1010	LEAVE HOSPITAL/SCENE
1014	LIFT-OFF
1119	LAND AT RECEIVING FACILITY

Pt. coded - L/O delayed until rhythm restored

MODE OF TRANSPORT

HELICOPTER/ALTITUDE	2000
FIXED WING/ALTITUDE	
GROUND AMBULANCE	
LOADED MILES	[redacted]

DISPATCH INFORMATION trapped in vec
25-28 - No additional info

IV SIZE/ SITE		FLUID	RATE	PUMP
? # 16	(R) pand	LR	KVO	—
? # 16	(L) pand	LR	KVO	—

MEDICATION	DOSE	ROUTE	TIME
see nurses notes			

		PREFLIGHT	INFLIGHT	TOTAL
INTAKE:	IV	1500	2500	I: 4000
	BLOOD			
OUTPUT:	URINE	100	100	O: 200
	BLOOD			
	LEVINE			
	EMESIS			

MONITORING:

Zoll ✓ Lifepak X — Pacer pads — Defib Pads — Propaq106 ✓ Oscillomate — Nonin —

Secured to litter ✓ Secured to AC ✓ Restraints — Ear Protection ✓ Vent —

TIME	0940	0948	0956	1000	1008	1021	1038	1039	1101	1105	1118
BLOOD PRESSURE	210/130	214/132	216/138	193/123	157/129	150?/— not obtained	83/66	68/43	138/96	215/114	173/—
PULSE	186	140	135	118	69	30	100	100	pacer 100	100	100
CAP. REFILL	3 sec	2 sec	→	→	→	→	→	→	→	→	→
RHYTHM	ST	ST	ST	ST	SR	SB	Pacer	→	→	→	→
RESP. RATE	bag at 30cc	hyperventilate 28		20 -	22 / min		——				
OXYGEN %/MODE	100% / NR	100% / ETT	/	/	/	/	/	/	/	/ →	/
02 SATURATION %	98%	99%			96%				99%		
ETT PLACEMENT	N/A	ok	→	→	→	→	→	→	→		
ETCO2	N/A	unable to obtain accurate reading									
PUPILS: SIZE R/L	2/2	2/2	/	/	/	/	/	/	/	/	/
GLASGOW:E/M/V	1/2/1	1/1/1	/ /	/ /	/ /	1/1/1	/ /	/ /	1/1/1	/ /	/ /
GCS TOTAL	4					3			3		
TRAUMA SCORE	6										

HISTORY:

Chief Complaint: Mult. trauma ~ MVA at CPP 0830

History present illness/injury: Pt. involved in head-on MVA - Windshield, sand-bags & air-bag inflated / hx EMS on scene - Pt. required extrication - EMS states steering wheel "wrapped" around pt. Chest & brain damage caused to driver side of car ~ possible second impact - Attempting intubation when FF arrived - ON LSB ~ C-collar & head-blocks in place - ~ IV's in place - EMS stated

PMHX:

Allergies: unknown

Home Meds: unknown

Last PO intake: unknown

Immun./Tetanus: unknown

Hosp./Surgeries: unknown

LABS: BLOOD — WBC | Hgb: Not available | Hct | Glu | Na | Cl | K | HCO3 | Bun-cr

X-ray: Chest

EKG: None

PHYSICAL EXAM:

Head: Bruising at sagom. areas of face - Bleeding from ear, on head - Unable see due to immobilization

Eyes: No drainage - Pupils 2mm & non-reactive (Lt) pupil had been reported F+D by EMS at scene

Ears: No drainage

Nose: No drainage

Mouth/Neck: C-collar in place - Clamping teeth - Trachea midline - ∅ JVD

Chest: BBS ess. clear - Chest movement symmetrical - ? Flail segment palpated on (Lt) side? - Bruising to (Lt) side of chest

Heart: $S_1 S_2$ present - Monitor - ST ~ ∅ ectopic - Peep. pulses present

Abdomen: Abd. soft ~ Neg BS

Extremities: Outward posturing all extremities

G.U.: Foley ~ amber urine - Pelvic rock Negative

Neuro: Posturing - Clenching teeth - Not responsive to stimuli

Skin Integument: Skin pale, w/D - IV's as documented

CLINICAL NURSING IMPRESSION: Head + Chest Trauma 2° to MVA (Mannitol 100 gm IV started & leaving ER)

PREFLIGHT TREATMENT: Pt. found immobilized - Staff attempting intubation - Unable to due to clenching teeth - Succ 80mg IVP given @ 0945 - Intubated ~ difficulty - BBS auscultated (Pt. hyperventilated ~ intubated) - SpO2 ↓ to (Lt) - Tube pulled back & secured at 22cm at lips - X-rays obtained (Not sent ~ pt) - Norcuron 8mg IV given by request of Dr. [redacted] for clenching of teeth & difficulty in ambuing pt - No problem noted ~ Norcuron administration - [redacted] called & informed of Pt. status & informed of above assessment - Transferred via cot to helicopter - FF Pt. loaded at 1010, HR↓

INFLIGHT - 30 - Epi ~ mg IV given ~ return of HR to 72 - Pulse present - HR V° at 1011, Epi ~ mg IV given & Return to 68 - @ 1012, pt. in V-fib - Cardiac thump done - CPR in progress - Placing def. PADS - Dr. [redacted] at a/c as medical control for Code - Continued to hyperventilate - Epi ~ mg at 1017 - Pt. in EMD at 1019 - Atropine ~ mg given - 1021: Epi ~ mg IV given 1022: Pt in V-fib - Defib at 200, 300, 360 J ~ ∅ response - Atropine ~ mg at 1023 & Epi ~ mg at 1024 - Defib at 360 J - Lidocaine 100 mg at 1025 - CPR continued & hyperventilations continue: 1028 - V-fib continues -

COMMUNICATIONS:

TIME	FACILITY	COMMENTS/ORDERS
0945	[redacted] H	Pt. report

Flight Nurse (signature): [redacted] RN — Paramedic/RN: [redacted] EMT-P — Pilot: [redacted]

Receiving RN/MD (signature): DR. [redacted] DOA — Medical Control: [redacted]

White - patient chart — Yellow - medical record — Pink - file

ADMISSION RECORD

MEDICAL RECORDS COP

ACCT. NO	ADMIT. DATE/TIME	FC	DATE OF BIRTH	AGE	SEX	RACE	MS	SERVICE	STATION	ROOM NO	ACC	PAT TYPE	INIT	UNIT NO
[redacted]	[redacted]1994 11:19	S	[redacted]	23Y	M		U	ERS	ER	-		ER	[redacted]	[redacted]

PATIENT

PATIENT NAME/ADDRESS: [redacted]
UNKNOWN, NONE
[redacted] IN [redacted]

SOCIAL SECURITY
PHONE

PATIENT EMPLOYER
PHONE
HOW LONG

GUARANTOR

GUARANTOR NAME/ADDRESS: [redacted]
UNKNOWN, NONE
[redacted] IN [redacted]

SOCIAL SECURITY
PHONE
RELATION: SELF

GUARANTOR EMPLOYER
PHONE
OCCUPATION
HOW LONG

RELATIVE

RELATIVE

RELATIVE EMPLOYER

INSURANCE

INS. 1

INS. 2

INS. 3

INS. 4

MISC.

DIAGNOSIS COMPLAINT	ACC WK. REL.	DATE/TIME	ADM TYPE	SOURCE	ARRIVAL MODE	DENOM
TRAUMA	YES		2	3	HELICOPTER	UNK

ADMITTING PHYSICIAN	PREV. ADMIT. NAME	DATE	SMK	PUB	VAL	PAT CLA	ROOM PREF	CHURCH
NONE, DOCTOR			U		N			UNKNOWN

ATTENDING PHYSICIAN: [redacted]

Advanced Directives:

TESTS ORDERED:

Organ Donor:

PRINCIPAL DIAGNOSIS (THE PRIMARY REASON, AFTER STUDY, OCCASIONING THE PATIENT'S ADMISSION TO THE HOSPITAL.)

CODE N

427.5
E819.?

ASSOCIATED DIAGNOSIS(ES)

SPECIAL PROCEDURES AND OPERATIONS

SIGNED _____ DATE _____
ATTENDING PHYSICIAN

[redacted] **PATIENT ASSESSMENT** [redacted]

Def at 360 + epi 1 mg given - 1030 - High dose epi 1 amp given + def at 360 J - 1031 - Pt. in EMD - Chest decompressed to (Lt) mid-clavicular c No air escape Noted (Chest sounds better c decompression to (Lt) side) 1032: V-fib - Defib at 360 J - Mag sulfate 2gm IV given - 1035: External pacer placed c MA 100 + Rate 100 - Captured HR - BP 83/66 - (all ACLS drugs given by staff of [redacted]H) Fluids wide - Dopamine at 40cc/hr (12 mcg/kg/min) - Mannitol off during code - Pupils fixed + dilated - During transport, [redacted]H informed of pt's pt. status - ER MD requested HR ↓ 80 on pacer + fluids wide - Also stated Dopamine could be ↑ to 50cc if needed - Attempted to ↓ pacer rate but HR ↓ 40, rate ↑ 100 c good return of Rate - Femoral pulse present + V.D freq. during transport - Ambu continued at 20-22/min - Dop ↓ to 30cc at 1101 + fluids slowed - Mannitol restarted/order ER-MD - BP 215/1H at 1105 - [redacted]H informed of changes in pt. status - Cot unloaded + placed on cot for transport to ER - During transport while in elevator, pt. Noted to be ∅ femoral pulse - CPR started - Mannitol off - Fluids wide + Dop at 40cc/hr - Care to ER staff - [redacted]

TRIAGE TIME: 1120

TREATMENT PRIORITY
- [x] IMMEDIATE
- ☐ URGENT
- ☐ NON-URGENT
- ☐ RECHECK

ALLERGIES: ? ☐ NONE

LAST T.T.

CURRENT MEDICATIONS: ☐ NONE ?

ARRIVAL
- ☐ AMBULATORY
- ☐ WHEELCHAIR
- [x] CART
- ☐ CARRIED

BROUGHT BY
- ☐ SELF
- ☐ POLICE
- ☐ RELATIVE / FRIEND
- ☐ AMBULANCE
- [x] HELICOPTER
- ☐ OTHER

PAST MEDICAL HISTORY: ? ☐ NONE ?

SMOKES: YES ☐ NO ☐

NURSING RECORD: ILLNESS ☐ ACCIDENT [x] OTHER ☐ DATE: [redacted] 94 TIME: ? JOB RELATED YES ☐ NO [x]

DATA: MVA – LIFEFLIGHT TRANSFER FROM [redacted] admitted c pacer on. Dopamine running. MANNITOL stopped prior to arrival in ER – Now running slowly. MVA – HEAD ON – RESTRAINED DRIVER – POSSIBLE! LACERATIONS TO BACK of HEAD. HEAD INJURY. PT. EXTRICATION 40 MINUTES – Bagged by [redacted] EMS person according to report from [redacted]. STAFF. PT. ARRIVES INTUBATED – VENTILATED by BAG PER R.N. ON LONG

NURSING DIAGNOSIS: BOARD c C Collar, Gross Blood flowing from back of head. NO BRUISES NOTED [redacted] RN./P: [illegible] RN.

TIME	B/P	PULSE	R	TEMP.	PHYSICIAN NOTIFIED	CALLED/ NOTIFIED	ANSWERED	SAW PATIENT
1129 – Start CPR – pacer on					[redacted]	Here		
						here		
See p. 2								

NO POSSESSIONS, NO CLOTHING OR JEWELRY FOUND WITH PATIENT. NO WALLET OR EYEGLASSES

O C
- [x] ABG
- [x] AMYLASE
- [x] BAL
- ~~CARDIAC PROFILE~~
- [x] CBC
- [x] DIFF
- [x] BS
- [x] BUN
- [x] LYTES
- [x] CR
- CULTURE
- [x] PT
- [x] PTT
- [x] T&C
- [x] UA
- OTHER: CK, HBG, ~~[illegible]~~

Across 4 pc
Drug screen urine
" serum

O_2 MIN ___ NASAL ☐ MASK ☐

PULSE OX ___ % ☐

DINAMAP ☐ MONITOR [x]

TIME: 1120

RHYTHM: asystole / paced

OLD RECORDS ☐

- EKG
- X-RAY
- PORT. CHEST [x] [x]
- SKULL
- C-SPINE
- LS SPINE
- → ↑ abd
- ANKLE
- CAT SCAN
- TYPE:
- OTHER

I.V.: R/L wide open Ⓡ forearm Near AC

Had 4000cc R/L prior to arrival

IV - MEDICATIONS/SITE

Last Pavulon 1½ hr ago. Has had 3mg ~~ATROPINE~~ and 2 GM mag sulfate prior to arrival there. Defib x many times prior to transport according to flight nurse

Disp ___ By ___ Time ___
Disp ___ By ___ Time ___
Disp ___ By ___ Time ___
Disp ___ By ___ Time ___
Disp ___ By ___ Time ___

051204 See p. 2

SIGNATURE [redacted]

☐ TREATED AND RELEASED ☐ AMA ☐ WALKOUT [x] EXPIRED ☐ ADMIT ☐ OP OBSERV. ☐ TRANSFER ☐ OTHER:

CONDITION ON DISCHARGE ☐ IMPROVED ☐ UNCHANGED ☐ DETERIORATED DISCHARGE NURSE: ___ TIME: ___

ADMISSION #___ ROOM #___

DIAGNOSIS: MVA – Head Inj

PHYSICIAN SIGNATURE: [redacted] ER DICTATED ☐

DATE

MEDICAL RECORDS

BEST AVAILABLE COPY

HOSPITAL
EMERGENCY DEPARTMENT
NURSING TREATMENT RECORD

DATE	TIME	CR	ND	COLLABORATION/ACTION & RESPONSE RECORD
[redacted]	1130		D -	Meter off. CPR in progress. No pulse
				when CPR stopped.
	1131		A -	V.FIB — DEFIB @ 200j. → Nonresponsive
	1131			V.FIB — Defib @ 300j → continue
	1132			CPR. Stop CPR → Asystole. Continue
	1134			CPR. Puncture (L) lower chest Epical
				3 1/2 IN 18g. per Dr. [redacted] X2
	1135		A -	Pacer on — Not capturing. Mannitol
				is running slowly c̄ Dopamine.
	1135		D -	continue CPR — pacer off.
	1137		A -	i AMP BICARB I.V. per [redacted] RN
				Stop mannitol. Dopamine on
				pump @ 50cc HR. F/L (R) arm
	1139		A -	I.V. R/L wide open (5th liter running)
				CPR continues. # 7FR 2 lumen
				Arrow Central Venous Cath per (L)
				femoral vein per Dr. [redacted] c̄ 1 l
				NS running wide open.
	1142		D -	asystole. CPR continues
	1143		A -	Dr. [redacted] attempting to anchor NG tube
				#16 Salem Sump. CPR continues
	1145			Foley has 300cc urine - clear yellow
				in bag. CPR continues. 3 Precordial
				thumps per [redacted] to sternum. Stop
				CPR — pacer on.
	1146		D -	pacer off. No pulse - Stop CODE
	05 1204			Pronounced per Dr. [redacted]
				and Dr. [redacted] - [redacted] RN.

ADDRESSOGRAPH

KEY:
- C = Chaplain
- CR = Collaborative Referral
- D = Dietary
- DAR = Data, Action, Response
- DI = Discharge Instructions
- HD = Health Department
- ICN = Infection Control Nurse
- ND = Nursing Diagnosis
- NU = Nursing Unit
- PH = Physician
- PC = Poison Control
- P = Police (City/County)
- RC = Respiratory Care
- S = Security
- SS = Social Services
- SP = Supervisor
- SWMH = Mental Health

CR - Collaborative Referral to include date, name of person contacted, subject of collaboration, outcome of collaboration, RN signature.

WHITE: CHART/MEDICAL RECORDS YELLOW: LOG PINK: PHYSICIAN

HOSPITAL
EMERGENCY DEPARTMENT
NURSING TREATMENT RECORD

DATE	TIME	CR	ND	COLLABORATION/ACTION & RESPONSE RECORD
[redacted]	94		1146 A-	Doa Record of Death. ———
				POST MORTEM CXR - AP portable done in ER. No family has arrived here. Grandparents
			1215 A-	Contacted Organ Procurement Service.
			1245 D-	[redacted] here from ME OFC. Waiting for grandparents & Coroner. Grandparents are enroute from Kentucky. Mom is in [redacted] according to nurse @ [redacted] Hospital [redacted] ER.
			1255 D-	Coroner here.
			1330 D-	grandparents here. This E.N. spent 1/2 hr. w/ family. When approached about Tissue donation - grandparents very much against this. ———
		1	1400 D-	family speaking w/ [redacted] coroner. Mrs. [redacted] phoned ER. She is mother: address [redacted] IL [redacted] phone # [redacted]. She spoke w/ her Dad Mr. [redacted] (pt. grandpa) and coroner for 40 minutes. She insists that autopsy wait for 5/13/94 So she can be present. [redacted] EN

ADDRESSOGRAPH

P. 3

KEY:

C	= Chaplain	NU	= Nursing Unit
CR	= Collaborative Referral	PH	= Physician
D	= Dietary	PC	= Poison Control
DAR	= Data, Action, Response	P	= Police (City/County)
DI	= Discharge Instructions	RC	= Respiratory Care
HD	= Health Department	S	= Security
ICN	= Infection Control Nurse	SS	= Social Services
ND	= Nursing Diagnosis	SP	= Supervisor
		SWMH	= Mental Health

CR - Collaborative Referral to include date, name of person contacted, subject of collaboration, outcome of collaboration, RN signature.

HOSPITAL
EMERGENCY DEPARTMENT
NURSING TREATMENT RECORD

DATE	TIME	CR	ND	COLLABORATION/ACTION & RESPONSE RECORD
[redacted]4	1126			[redacted] Called from [redacted]
				Hospital. States she has spoken 2 the
				patients mother - [redacted] - in
				[redacted] Dr. She wants everything done
				for [redacted] in order to save his life
				but if he should die she gives permission
				for Organ Donation. Grandparent
				are in route to the E.R. - Grandfather
				[redacted] ph # [redacted]
				[redacted]

ADDRESSOGRAPH

KEY:

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P. 4

RECORD OF DEATH — HOSPITAL

DEMOGRAPHIC DATA

Name: Mr. / Mrs. / Miss / Baby [redacted] (last name, first name, middle initial)
Age: 23 YEARS
Date of Birth: [redacted]
Address: [redacted] KENTUCKY [redacted]
Social Security Number: UNKNOWN (Obtain from face sheet)
Pronounced by (Physician): [redacted]
Time of Death: 1146 Date: [redacted]/94
Primary/Covering Physician: NONE
Notified by: Date: Time:
Relative/Guardian: [redacted] - grandpa (Name)
Notified by: [redacted] RN Date: [redacted] Time: 1330
Address/Phone Number: [redacted] KY. Relationship to Deceased: GRANDPA
Remarks:
Nursing Practice Office notified: [redacted] (person notified)
Notified by: [redacted] RN Date: [redacted] Time: 1205

AUTOPSY

Nurse must ask physician if autopsy indicated.
Reason for Autopsy as indicated by Physician to _____ (Name, Title of RN Calling) (Check criteria applicable):

- ____ To help explain unknown/unanticipated medical and/or surgical complications.
- ____ Obstetrical complications.
- ____ Clinical cause uncertain (any age).
- ____ Family concerns.
- ____ Patient participation in clinical trial approved by Institutional Review Board.
- ____ Sudden unexpected and/or unexplained death, apparently natural, without diagnosis prior to death and not subject to Coroner's medical jurisdiction.
- ____ Probable disclosure of a known/suspected illness which might have significance to survivors or recipients of transplant organs.
- ____ Exceptional academic interest which may contribute to knowledge base.
- ____ Psych service.

N/A

Autopsy: X Yes ___ No Requested by: ___ Physician ___ Family
___ Complete ___ Head Only ___ Trunk Only
If physician wants autopsy, check which options physician prefers for obtaining consent from family (RN must ask the physician):

- ____ Physician will come to unit and get consent.
- ____ Physician will obtain consent by telephone.
- ____ Physician requests ER physician to obtain consent.
- ____ If so:

N/A

_____ by _____
(Name of ER MD notified) (Name/Title)
at _____ on _____.
(Time) (Date)
Authorization signed by next of kin? ___ Yes ____ No
Pathologist notified: _____ (Person notified)
_____ _____
(Notified by) (Date/Time)
Autopsy scheduled for: Date_____ Time_____

ADDRESSOGRAPH

AUTOPSY (continued)

Does physician request NPO to notify him of date/time of autopsy? ____ Yes X No
NPO notified: X Yes ___ No [redacted] (Person notified)
Notified by: [redacted] RN at 1205
(Name/Title) (Time)

CORONER'S CASE

X Yes ____ No Coroner notified: X Yes ____ No
_____ (Name of Coroner/Deputy Coroner)
Notified by: [redacted] RN Date [redacted] Time 1212
Coroner requests autopsy? X Yes ___ No
Remarks:
Body sent to: [redacted] MORGUE by Coroner for Autopsy.
Body released back to hospital? ____ Yes X No
Body released to Coroner? X Yes ____ No
Released by whom: [redacted] RN
X [redacted] [redacted] 1500
(Coroner/Coroner's Representative Signature) (Date) (Time)

RELEASE OF BODY/BELONGINGS FROM UNIT

List belongings (such as glasses, dentures, jewelry, purse/wallet, clothing, etc.) released to: NO BELONGINGS

Morgue: _____ NPO: _____
Family: _____ Other: _____
R.N. Signature: X [redacted]
Body taken to Morgue by: [redacted] (Name)
[redacted]-94 1540 - 1550
(Date) (Time)

HOSPITAL
EMERGENCY DEPARTMENT
NURSING TREATMENT RECORD

DATE	TIME	CR	ND	COLLABORATION/ACTION & RESPONSE RECORD
[redacted] 1-7-17	1445		A-	family here in Room to view Body. Coroner will call [redacted] for transport from our morgue to [redacted] Co. Morgue KN

ADDRESSOGRAPH

0.5.

KEY:

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ND	= Nursing Diagnosis	SP	= Supervisor
		SWMH	= Mental Health

CR - Collaborative Referral to include date, name of person contacted, subject of collaboration, outcome of collaboration, RN signature.

Hospital
Thu [redacted] 1994 01:06 pm
Outpatient Summary Report

Pat Name:
Unit #/Acct #:
Loc:
Phys-Service: - EMERGENCY

****

In: [redacted]94 1207
Out: [redacted]94 1220
Coll Time: [redacted]94 1200
Order Phys: [redacted]

| AMYLASE,SERUM |

Spec: Blood
Techs: [redacted]

Corrected *STAT*STAT*STAT*

Result Name	Result	Ref Range
Amylase(U/L):	<30 L	37-117

In: [redacted]94 1207
Out: [redacted]94 1220
Coll Time: [redacted]94 1200
Order Phys: [redacted]

| METABOLIC PROFILE 7 |

Spec: Blood
Techs: [redacted]

*STAT*STAT*STAT*

Result Name	Result	Ref Range	Result Name	Result	Ref Range
Sodium(mmol/L):	136	135-148	Glucose,R(mg/dl):	235	>60
Potassiu(mmol/L):	5.9 H	3.5-5.3	Urea Nitr(mg/dl):	14	7-21
Chloride(mmol/L):	96 L	98-106	Creatinin(mg/dl):	1.8 H	0.8-1.5
CO2(mmol/L):	17 L	23-30			

In: [redacted]94 1207
Out: [redacted]94 1245
Coll Time: [redacted]94 1200
Order Phys: [redacted]

| DRUG SCREEN,SERUM |

Spec: Blood
Techs: [redacted]

*STAT*STAT*STAT*

Result Name	Result	Ref Range
Acetaminophen(ug/ml):	None Detected	Therapeutic Range= 10-30 Potentially Toxic= >120 at 4 Hrs post-med Potentially Toxic= >50 at 12 hrs post-med
Barbiturate(ng/ml):	None Detected	None Detected/Cutoff= 3000
Benzodiazepines(ng/ml):	None Detected	None Detected/Cutoff= 300
Salicylate(mg/dl):	<0.5	Antipyresis= <100 Anti-inflammatory= 150-300 Potentially Toxic= >300
Tricyclic Antidepres(ng/ml):	None Detected	None Detected/Cutoff= 300
Chain-of-Custody:	Specimen not submitted under custody.	

Hospital
Thu [redacted], 1994 01:06 pm
Outpatient Summary Report

Pat Name:
Unit #/Acct #:
Loc:
Phys-Service: - EMERGENCY

In: [redacted]/94 1207
Out: [redacted]/94 1243
Coll Time: [redacted]/94 1200
Order Phys: [redacted]

ALCOHOL,SERUM

Spec: Blood
Techs: [redacted]

*STAT*STAT*STAT*

Result Name	Result	Ref Range
Alcohol, Ethyl(mg/dl):	None Detected	None Detected

End of Report - [redacted]/94 1305

Hospital
[redacted] 01:09 am
Outpatient Summary Report

Pat Name: Page: 1
Unit #/Acct #:
Loc:
Phys-Service: - EMERGENCY

In: [redacted]94 1257
Out: [redacted]94 1341
Coll Time: [redacted]94 1257
Order Phys: [redacted]

| DRUG SCREEN (ER), URINE |

Spec: Urine
Techs: [redacted]

*STAT*STAT*STAT*

Result Name	Result	Ref Range
Amphetamines(ng/ml):	None Detected	None Detected/Cutoff=1000
Barbiturates(ng/ml):	None Detected	None Detected/Cutoff= 200
Benzodiazepines(ng/ml):	None Detected	None Detected/Cutoff= 300
Cannabinoid Metaboli(ng/ml):	None Detected	None Detected/Cutoff= 50
Cocaine Metabolite(ng/ml):	None Detected	None Detected/Cutoff= 300
Opiates(ng/ml):	None Detected	None Detected/Cutoff= 300
Phencyclidine(ng/ml):	None Detected	None Detected/Cutoff= 25
Spec Gravity:	1.020	1.005-1.030

In: [redacted]94 1207
Out: [redacted]94 1343
Coll Time: [redacted]12/94 1200
Order Phys: [redacted]

| CBC |

Spec: Blood
Techs: [redacted]

*STAT*STAT*STAT*

Result Name	Result	Ref Range
WBC(1000/mm3):	5.2	4.8-10.8
RBC(mill/cumm):	3.44 L	4.6-6.2
Hgb(gm/dl):	10.0 L	14.0-18.0
Hct(%):	29.5 L	40.0-54.0
MCV(fl):	85.6	80.0-94.0
MCH(pg):	29.1	27.0-31.0
MCHC(%):	34.0	32.0-36.0
RDW(%):	12.0	
Platelets(1000/mm3):	77 L	150-400
MPV(fl):	6.6	
Neut(%):	46.4 L	52-82
Lymphs(%):	50.3	
Eos(%):	1.5	
Basos(%):	0.0	
Monos(%):	1.8	
RBC Morph:	Slight Anisocytosis Poikilocytosis Acanthocytes	Normal

Hospital
[redacted] 1' [redacted] 01:09 am
Outpatient Summary Report

Pat Name: Page: 2
Unit #/Acct #:
Loc:
Phys-Service: EMERGENCY

In: [redacted]94 1257 | URINALYSIS WITH MICRO | Spec: Urine, Voided
Out: [redacted]94 1232 | | Techs: [redacted]
Coll Time: [redacted]94 1257
Order Phys: [redacted]

*STAT*STAT*STAT*

Result Name	Result	Ref Range
Color:	Yellow	
Clarity:	Clear	
Spec Gravity:	1.020	1.005-1.030
LES:	Negative	Negative
Nitrite:	Negative	Negative
pH(pH Units):	5.5	
Protein(mg/dl):	Trace	Negative
Glucose:	1+	Negative
Ketone:	Negative	Negative
Urobilinogen(gm/dl):	Normal	<1 mg/dl
Bilirubin:	Negative	Negative
Blood:	Negative	negative
WBCs(/HPF):	0-2	
RBCs(/HPF):	0-2	
Epiths(/HPF):	0-2	
Bacteria(/HPF):	0-2	Negative

End of Report - [redacted]94 0110

HOSPITAL
, Indiana [redacted]

PATIENT NAME: [redacted]

DATE OF EMERGENCY ROOM VISIT: [redacted]/94

EMERGENCY ROOM PHYSICIAN: M.D.

PERSONAL PHYSICIAN: NONE

HISTORY OF PRESENT ILLNESS: This 23-year-old white male was transferred from [redacted] Hospital via Life-Flight. The patient was involved in a motor vehicle accident. He was noted to have a head injury and possible chest injury at the scene. The patient was unconscious and barely breathing. He was intubated and paralyzed. His pupil was dilated on the left at the scene and was dilated and mid-point in the hospital. Apparently they were fixed. There was no sign of abdominal or limb injury. The patient was loaded in the helicopter went he went into electromechanical dissociation and a temporary bout of atrial fibrillation. The patient was resuscitated and transferred.

EMERGENCY ROOM COURSE: As he was arriving the patient again went into electromechanical dissociation and then to fine atrial fibrillation and eventually asystole. He was counter-shocked. Cardiopulmonary resuscitation was maintained. Dr. [redacted] saw him in the emergency room. The patient was given a fluid challenge. Pericardiocentesis was uneventful as was attempt aspiration of possible tension pneumothorax. There were no signs of significant abdominal injury. The patient persisted in asystole.

ASSESSMENT:
1. Motor vehicle accident with head and possible chest trauma presenting as a trauma code.

PLAN: The patient was pronounced after resuscitation methods were exhausted.

M.D.

[redacted]
D: [redacted]/94
T: [redacted]/94
Tape #[redacted]

****** EMERGENCY DEPARTMENT NOTE ******

[redacted] HOSPITAL
, Indiana [redacted]

PATIENT:

DATE OF ER VISIT: [redacted]94

EMERGENCY ROOM PHYSICIAN:

PERSONAL PHYSICIAN: [redacted], M.D.

HISTORY: Mr. [redacted] is a young white male who was involved in a motor vehicle accident and transferred here via LifeFlight. He had cardiac arrest prior to getting out of the sending hospital Emergency Room and had to return. He was intubated, given IV Pavulon, resuscitated and transferred here. He has remained hypotensive. He arrest during transfer from the roof down to our facility. He is in electromechanical dissociation, atrial fibrillation followed by flat line. He would not respond to external pacing. A pericardial centesis returned no fluid. A needle aspiration of the left chest cavity where the previous Heimlich valve had been placed returned no fluid. A left femoral venous catheter was inserted. Good venous blood was obtained, samples obtained, secured in place. A complete medical code was run. Several liters of fluid, IV saline were given. He remained in flat line EKG. We could not generate any cardiac rhythm. He was pronounced dead at 11:46 a.m. on [redacted]94.

[redacted], M.D.

D&T [redacted]94 [redacted]

****** EMERGENCY DEPARTMENT NOTE ******

Autopsy

AUTOPSY REPORT

COUNTY

[redacted] 1994

The autopsy examination is performed for the [redacted] County Coroner's Office at the request of Chief Deputy Coroner [redacted]. The examination is performed at the [redacted] County Coroner's Office Facility in [redacted] Indiana and commences at approximately [redacted] p.m. of [redacted] 1994.

CLINICAL HISTORY

The clinical history is that the patient is a 23 year old Caucasian male, date of birth [redacted] with stated residence address of [redacted] Kentucky. He is listed as a student. The patient was the apparent driver involved in a head-on motor vehicle accident within [redacted] Kentucky, [redacted] County. The location of this accident is about .10 mile west of mile marker number [redacted] on Highway [redacted] Kentucky. The patient was initially brought to [redacted] Hospital and was subsequently transferred by LifeFlight helicopter to [redacted] Hospital in [redacted] Indiana. The patient apparently arrived in the emergency room at 11:19 a.m. of [redacted] 1994. At the time of arrival in the emergency room, the patient was noted to have apparent closed head injuries. Cardiopulmonary resuscitative measures were in progress. The patient arrived intubated. The subsequent resuscitative measures were unfortunately unsuccessful and he was pronounced dead at 11:46 a.m. of [redacted] 1994, by Dr. [redacted] in the emergency room at [redacted] Hospital. During resuscitation, the patient developed ventricular fibrillation and was administered defibrillation, but was ultimately unsuccessful. He is reported to be a restrained driver involved in this motor vehicle accident. The patient's next of kin is listed as his mother, [redacted] of [redacted] Illinois. The mother, [redacted] requested of this examiner to be present and witness her son's autopsy examination. This examiner declined her request. Laboratory data recorded from the hospital includes hematocrit of 29.5%, hemoglobin 10.0, white cell count 5200, platelet count 77,000, sodium 136, potassium 4.9, chloride 96, CO_2 17, glucose 235, BUN 14, creatinine 1.8 and amylase of 30. In addition, a drug screen was performed at the hospital and revealed urinary drug screen which is negative for amphetamines, barbiturates, benzodiazepines, canadinoids, cocaine, opiates, phencyclidine, acetaminophen, salicylates, tricyclic antidepressants and alcohol, all being negative findings.

EXTERNAL EXAMINATION

The external examination reveals the remains of a young Caucasian male consistent with his stated age of 23 years. He is about 6'2" tall and weighs about 178 lbs. The scalp hair is short to moderate length, brown color. This person is of a slim, muscular build. IV site is present in place, taped, in the left forearm region. A metal splint is present on the right forearm region. Focal moderate petechial hemorrhages are present on the mucosal surface of the lower eyelids bilaterally. Nose appears intact. The eyes are brown. Pupils are 0.5 cm in diameter, bilaterally. Ears show no evidence of bloody drainage at this time. Mouth appears intact. There is superficial abrasion of the lower lip, midline region. Face appears relatively clean shaven. There is a plastic catheter tube present in the left anterior chest, left subclavian region, at this time. Hospital identification bracelets are present on right and left wrist regions. Chest and abdomen appears intact. The abdomen is flattened. External genitals are those of a young Caucasian male. Rigor mortis is present in the extremities and livor mortis is present posteriorly in the lumbosacral regions. The body is cool due to post mortem refrigeration. The lower extremities appear intact. There is an IV line present in place in the left groin region. The teeth appear to be in good repair. No evidence of loose or fragmented teeth seen. Maxilla and mandible appear stable. Manipulation of the neck reveals no definite cervical spine fractures or dislocations. Examination of the scalp reveals there to be vertically oriented laceration on the left occipital scalp region, posterior to the left ear. This laceration measures about 4.8 cm long and extends down to the underlying occipital skull region. There is an apparent open skull fracture which allows insertion of a digit between the fracture lines into the underlying cortical tissues. No other lacerations are seen on the head or scalp regions. Palpation of the pelvis reveals no evidence of pelvic fracture. Clavicles appear intact. No subcutaneous emphysema of chest or abdominal regions is seen. No evidence of old or recent surgical scars seen. Negative for tattoos. There is some dried blood present within the left external ear canal. The back, spine and anus reveals only livor mortis to be present. Further inspection of the scalp reveals there to be present a vertical midline occipital laceration which extends down to the underlying midline occipital bone. This measures about 3.5 cm in length. The back, spine and anus appear intact and unremarkable. External genitalia are those of a young Caucasian male.

HEAD EXAMINATION

The usual semilunar-shaped intraauricular scalp incision is made and skin flaps reflected anteriorly and posteriorly. There is moderate amounts of subcutaneous scalp interstitial hemorrhage in the left temporal occipital scalp region and mild amounts of interstitial hemorrhage in the posterior occipital scalp regions. Inspection of the cranial surfaces reveals there to be a linear line of bone indentation in a vertical pattern present in the left parietal occipital skull region. This is more or less vertically oriented, has a width of about 0.8 cm and shows indentation of bone along a sharp

bony ridge. This measures approximately 2.5-3 cm long on the outer table of the skull. No definite skull fractures related to the posterior scalp laceration is seen. The bony cranial plate is removed by means of a Stryker saw revealing underlying pink, smooth and glistening meningeal surfaces. There is present mild to moderate subarachnoid hemorrhage on the lateral aspects of the left and right cerebral hemispheres. No evidence of cortical brain scarring is seen. There is present a region of cortical disruption in the left parietal temporal lobe region, which measures about 3.5 X 2.5 cm and which appears to be underlying a region of indented linear skull fracture in the left parietal occipital skull region. The inner table of the skull in this region shows compound fragmentation and indentation a distance of approximately 1-1.3 cm into the underlying cranial vault. The brain is removed and noted to weigh 1560 grams. Inspection of the surface of the brain reveals focal regions of cortical contusion which are present on the inferior aspects of the frontal, temporal and parietal lobe regions. The brain is subsequently serially sectioned in the coronal plane in the fresh state revealing there to be present regions of superficial and deep cortical contusion within the inferior portions of the frontal, temporal and parietal lobe regions. There is also noted to be present a small to moderate amount of liquid blood free within the right and left lateral horns of the third ventricle. The dura is stripped from the base of the skull revealing the described left parietal occipital indented skull fracture. There is also present an occipital skull fracture present in the midline occipital skull region in the posterior cranial fossa. Sections of the pons and cerebellum reveals a symmetrical, intact and unremarkable appearance. Inspection of the inferior surface of the brain shows no evidence of uncal, cerebellar or cingulate gyrus grooving. The vessels of the Circle of Willis appear intact. No evidence of berry aneurysm is seen.

PRIMARY INCISION

The usual Y-shaped anterior primary incision is made. Subcutaneous adipose tissue is 1.4 cm thick over the chest and 1.9 cm thick over the abdomen. The chest musculature is well developed for age. Skin flaps are reflected superiorly and laterally revealing unremarkable ribcage and sternum. Opening of the peritoneal cavity reveals pink, smooth and glistening peritoneal surfaces. There is a total of approximately 250 cc of liquid and clotted blood free within the peritoneal cavity. Close inspection of the abdominal viscera reveals there to be a region of mild interstitial hemorrhage and a small region of laceration which is present in the hilum of the spleen. This appears to be the source of free blood within the peritoneal cavity. No evidence of identifiable liver lacerations are seen. The urinary bladder is beneath the symphysis pubis and is essentially devoid of urine at this time. The small and large bowel and its mesentery is inspected revealing no evidence of traumatic injuries. The usual wedge-shaped anterior rib plate is removed revealing underlying pink, smooth and glistening pleural surfaces. The lungs appear moderately well aerated bilaterally. There is noted to be present a moderate to large amount of liquid and clotted blood within the left pleural

space. The volume is estimated at 1000 cc total volume. Inspection is then made of the left pleural space revealing there to be present a mild to moderate degree of posterior mediastinal interstitial hemorrhage which is noted along the left posterior pleural reflection. There is no evidence of identifiable disruption of the pleura in this region. Further inspection of the left pleural space reveals there to be a rounded needle-like fenestration of the parietal pleura of the left upper anterior chest region. This fenestration is in the interspace between the left anterior 1st and 2nd ribs and appears to be approximately underlying a region of plastic catheter placement at the skin surface level of the left upper chest. There is a moderate degree of interstitial hemorrhage behind the parietal pleura in this region. This interstitial hemorrhage is present over an approximate 5 cm wide area. The only region of identifiable laceration or fenestration in the left pleural space is in the region of this fenestration of the upper left anterior chest region. Palpation of the lungs reveals there to be present a moderate diffuse boggy texture to palpation. The pericardial sac is opened revealing a small amount of watery fluid. The heart does not appear to be enlarged.

ORGANS OF THE NECK

The usual anterior skin flap is reflected superiorly revealing underlying subcutaneous tissue and anterior neck musculature. No evidence of interstitial hemorrhage or disruption is seen. The hyoid bone is intact. The thyroid cartilage, cornu of thyroid cartilage, trachea and larynx are normal in their position and relationships. The thyroid gland is in the usual anatomic location, weighs about 30 grams and has a homogeneous pink-red, smooth and glistening appearance on sectioning. The epiglottis, true and false vocal cords, laryngeal and tracheal mucosa is pink, smooth and glistening. No evidence of foreign body obstruction of airways is seen. There is present a small amount of liquid blood present within the lower tracheal regions. There are focal mild numbers of petechial hemorrhages of the mucosal surface within the larynx.

HEART

The heart weighs approximately 320 grams. Inspection of the epicardial surface of the heart reveals there to be present mild numbers of petechial hemorrhages near the apex of the heart on the epicardial surface. The heart does not appear to be enlarged. The coronary ostia are normal in their position and relationships. Serial sectioning of left anterior descending, left circumflex and right coronary arteries reveals them to be wide open and patent throughout. The endocardial surface of the heart is pink-red, smooth and glistening. Trabeculae carneae, papillary muscles and chordae tendineae appear to be intact and unremarkable. Sectioning of the myocardium reveals it to be firm and pink-red throughout. Right ventricular thickness is 0.2 cm and left ventricular thickness is 1.4 cm. The aortic, mitral, tricuspid and pulmonic valves are thin, pliable and competent. The arch, thoracic and abdominal aorta and the major branches all appear intact and

unremarkable. No evidence of transection of aorta is seen. The superior and inferior vena cava appear intact.

LUNGS

The right lung weighs 1210 grams. The left lung weighs 890 grams. The pleural surfaces of the lungs are pink, smooth and glistening. Minimal anthracotic pigment deposition is present. The pulmonary artery and veins show no evidence of thromboembolic phenomenon. The bronchial radicles show a pink bronchial mucosal appearance. There is present a small amount of frothy edema fluid within the smaller bronchial radicles bilaterally. Sectioning of lung tissue reveals a pattern of a more or less diffuse pulmonary edema and congestion of all lobes. No evidence of acute or chronic inflammatory changes are seen. No purulent changes, cavitation, consolidation, abscess formation, cysts, tumors or masses within the lung tissue is seen.

MEDIASTINUM AND RETROPERITONEUM

There is present a mild to moderate degree of interstitial hemorrhage present in the posterior mediastinal interstitial regions. No evidence of disruption of major vessels seen. The retroperitoneum contains usual amounts of bright yellow adipose tissue. The diaphragm appears normally placed and intact. The omentum is present in the usual apron-like anterior arrangement.

LIVER

The liver weighs approximately 1600 grams. The capsule appears intact. The usual right and left lobes are present. The usual reddish-brown, smooth and glistening appearance is noted. The gallbladder is present on the inferior edge of the right lobe of the liver and contains a moderate amount of golden green bile without calculus formation. Sectioning of the liver reveals a pattern of a diffuse mild acute congestion. No focal hepatic lesions are seen.

SPLEEN

The spleen weighs 270 grams, has the usual bluish, wrinkled capsular surface and underlying dark red-brown hemorrhagic parenchymal tissues. There is a recent laceration of the hilum of the spleen. No focal splenic lesions are seen.

PANCREAS

The pancreas is in the usual retroperitoneal, periduodenal location and has the usual tan multilobular appearance. No cysts, tumors, masses or fat necrosis is seen in pancreatic regions.

KIDNEYS

The right kidney weighs 140 grams. The left kidney weighs 150 grams. The capsules strip easily from underlying pink-red, smooth and glistening cortical surfaces. The cortex averages 0.7 cm in thickness and is well demarcated from underlying medullary regions. The calices, pelvises and collecting system are lined by an ivory-colored mucosa which is free of stones, cysts, tumors, masses and other abnormalities. The ureters have a pink mucosa, intact muscular wall and follow a normal course.

URINARY BLADDER

The urinary bladder is present beneath the symphysis pubis and is essentially devoid of urine. The mucosa is light gray. The muscular wall is intact.

ADRENAL GLANDS

Adrenal glands have the usual size and shape with bright yellow cortex and gray medulla of the usual thickness. No focal adrenal lesions are seen.

GASTROINTESTINAL TRACT

The esophagus is straight and follows a normal course through a diaphragmatic hiatus of the usual width. The mucosa is pink. The muscular wall is intact. Opening of the stomach reveals it to contain a small amount of gray watery fluid. The usual rugal pattern is maintained. No evidence of gastric, pyloric or duodenal ulceration is seen. The duodenum, jejunum and ilium have a pink mucosa and intact muscular wall and contain moderate amounts of green mucoid material within the lumen. Cecum is present in the right lower quadrant with an unremarkable appearing cecal vermiform appendix present. The cecum, ascending, transverse and descending colons have pink mucosa, intact muscular wall and contain small to moderate amounts of poorly formed brown fecal material within the lumen. The sigmoid colon, rectum and anus appear intact and unremarkable in appearance.

BONES, JOINTS AND MUSCLES

Examination of the inner aspect of the axial skeleton including the cervical, thoracic, lumbar and sacral spinous regions reveals no evidence of gross fracture, deformity, dislocations, hemorrhages or other abnormalities. Examination of the inner aspect of the ribcage and sternum reveals no evidence of bony fractures or dislocations. Clavicles appear intact and unremarkable. The bones of the pelvis show no evidence of fracture, deformity, dislocations, hemorrhages or other abnormalities. The long bones of the extremities are freely movable at the joints without evidence of gross fracture, deformity, dislocations, hemorrhages or other abnormalities. The musculature is well developed for age.

RETAINED EVIDENCE: Multiple tissue biopsy specimens including heart, coronary artery, lung, liver, spleen, pancreas, kidney, adrenal gland, gastric mucosa, thyroid gland, trachea and brain biopsy tissue are placed in formalin for fixation. The formalin fixed tissue biopsy specimens will be maintained for a minimum period of five years after date of autopsy examination.

RETAINED EVIDENCE: Cardiac blood, eye fluid and gallbladder bile specimens are obtained during the course of autopsy examination and are forwarded to consultant laboratory for blood type and Rh factor and bile toxicology screen.

FINAL ANATOMIC DIAGNOSES:

1. STATUS POST RECENT BLUNT IMPACT TRAUMA TO THE HEAD, CHEST, AND ABDOMEN, WITH:
   - A. SCALP LACERATIONS OF LEFT PARIETAL-OCCIPITAL SCALP AND MIDLINE OCCIPITAL SCALP REGIONS.
   - B. LINEAR INDENTED DEPRESSED SKULL FRACTURE, LEFT PARIETAL-OCCIPITAL LOBE SKULL REGIONS; LEFT OCCIPITAL SKULL FRACTURE.
   - C. SUBARACHNOID HEMORRHAGE, BILATERAL CEREBRAL HEMISPHERES; CORTICAL DISRUPTION OF LEFT PARIETAL-TEMPORAL LOBE REGION; SUPERFICIAL AND DEEP CORTICAL CONTUSIONS, FRONTAL, TEMPORAL AND PARIETAL LOBE REGIONS; INTRA-VENTRICULAR HEMORRHAGE, LATERAL HORNS OF THIRD VENTRICLE.
   - D. POSTERIOR MEDIASTINAL INTERSTITIAL HEMORRHAGE.
   - E. LACERATION, HILUM OF SPLEEN; HEMOPERITONEUM, 250 CC ESTIMATED VOLUME.
2. PULMONARY EDEMA AND CONGESTION, RIGHT LUNG 1,210 GRAMS, LEFT LUNG 890 GRAMS.
3. LEFT UPPER CHEST PLEURAL FENESTRATION (LEFT ANTERIOR 1ST-2ND RIB INTERSPACE); LEFT HEMOTHORAX, 1,000 CC.
4. STATUS POST CLINICAL CARDIOPULMONARY RESUSCITATIVE MEASURES.
5. MODERATE PETECHIAL HEMORRHAGES, CONJUNCTIVA, LOWER EYELIDS, BILATERALLY.

COMMENT: This is the case of the death of a 23 year old male subsequent to an apparent head-on vehicle impact collision. He was the reported driver of a vehicle involved in this collision. The clinical diagnosis was that of a closed head injury. The autopsy examination reveals there to be present deep scalp lacerations of the left side of the head and the back of the head region. The scalp laceration to the left side of the head has an underlying linear, vertically oriented, indented, depressed skull fracture with an associated depression of the bone of the inner table of the skull in that region. Present within the underlying brain tissue beneath this depressed skull fracture is a region of disruption of the superficial cortex. There is present bilateral mild to moderate degrees of subarachnoid hemorrhage present. There is a moderate degree of both superficial and deep cortical contusions of the brain in the inferior portions of the temporal, frontal and parietal lobe regions. A pattern of contusions within the brain is suggestive of an axial movement of the head and brain in a front to back motion with subsequent contusion of the undersurface of the brain. The pattern of depressed indented skull fracture is suggestive of a linear portion of the inner surface of the vehicle impacting with the side of this young man's head. This would likely result in the patient becoming unconscious with death due to subsequent closed head injury. There is noted to be present, also, a left hemothorax which is felt most likely to be secondary to fenestration of the left upper anterior chest region related to a plastic catheter placement in this region. The cause of death in this case is that of subarachnoid hemorrhage; cortical laceration and contusions due to left skull fracture due to blunt impact trauma. The manner of death is accident.

, M.D.
FORENSIC PATHOLOGIST

Appendix J:

NASS CDS Occupant Assessment Form:

Vehicle #2 Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT ASSESSMENT FORM

Form Approved
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 10
2. Case Number - Stratum: 9409
3. Vehicle Number: 02
4. Occupant Number: 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age: 28
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older
(99) Unknown

6. Occupant's Sex: 2
(1) Male
(2) Female
(9) Unknown

7. Occupant's Height: 160
Code actual height to the nearest centimeter.
(999) Unknown
63 inches X 2.54 = 160 centimeters

8. Occupant's Weight: 075
Code actual weight to the nearest kilogram.
(999)Unknown
165 pounds X .4536 = 75 kilograms

9. Occupant's Role: 1
(1) Driver
(2) Passenger
(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position: 11
Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify): _____
(15) On or in the lap of another occupant

Second Seat
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify): _____
(25) On or in the lap of another occupant

Third Seat
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify): _____
(35) On or in the lap of another occupant

Fourth Seat
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify): _____
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify): _____
(99) Unknown

11. Occupant's Posture: 7
(0) Normal posture

Abnormal posture
(1) Kneeling or standing on seat
(2) Lying on or across seat
(3) Kneeling, standing or sitting in front of seat
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window
(5) Sitting on a console
(6) Lying back in a reclined seat position
(7) Bracing with feet or hands on a surface in front of seat
(8) Other abnormal posture (specify): _____
(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection — 0
    (0) No ejection
    (1) Complete ejection
    (2) Partial ejection
    (3) Ejection, unknown degree
    (9) Unknown

13. Ejection Area — 0
    (0) No ejection
    (1) Windshield
    (2) Left front
    (3) Right front
    (4) Left rear
    (5) Right rear
    (6) Rear
    (7) Roof
    (8) Other area (e.g., back of pickup, etc.) (specify):_____
    (9) Unknown

14. Ejection Medium — 0
    (0) No ejection
    (1) Door/hatch/tailgate
    (2) Nonfixed roof structure
    (3) Fixed glazing
    (4) Nonfixed glazing (specify):
    _____
    (5) Integral structure
    (8) Other medium (specify):
    _____
    (9) Unknown

15. Medium Status (Immediately Prior To Impact) — 0
    (0) No ejection
    (1) Open
    (2) Closed
    (3) Integral structure
    (9) Unknown

16. Entrapment — 1
    (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
    (0) Not entrapped
    (1) Entrapped
    (9) Unknown

RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4
(0) None available
(1) Belt removed/destroyed
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt available—type unknown

Integral Belt Partially Destroyed
(6) Shoulder belt (lap belt destroyed/removed)
(7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____
(9) Unknown

18. Manual (Active) Belt System Use 00
(00) None used, not available, or belt removed/destroyed
(01) Inoperative (specify): _____
(02) Shoulder belt
(03) Lap belt
(04) Lap and shoulder belt
(05) Belt used—type unknown
(08) Other belt used (specify): _____
(12) Shoulder belt used with child safety seat
(13) Lap belt used with child safety seat
(14) Lap and shoulder belt used with child safety seat
(15) Belt used with child safety seat—type unknown
(18) Other belt used with child safety seat (specify): _____
(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 0
(0) None used or not available
(1) Belt used properly
(2) Belt used properly with child safety seat

Belt Used Improperly
(3) Shoulder belt worn under arm
(4) Shoulder belt worn behind back or seat
(5) Belt worn around more than one person
(6) Lap belt worn on abdomen
(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
(8) Other improper use of manual belt system (specify): _____
(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident 0
(0) No manual belt used
(1) No manual belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor
(7) Combination of above (specify): _____
(8) Other manual belt failure (specify): _____
(9) Unknown

21. Air Bag System Availability/Function 0
(0) Not equipped/not available
(1) Air bag

Non-functional
(2) Air bag disconnected (specify): _____
(3) Air bag not reinstalled
(9) Unknown

22. Air Bag System Deployment 0
(0) Not equipped/not available
(1) Air bag deployed during accident (as a result of impact)
(2) Air bag deployed inadvertently just prior to accident
(3) Air bag deployed, accident sequence undetermined
(4) Nondeployed
(5) Unknown if deployed
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(9) Unknown

23. Are There Indications of Air Bag System Failure? 0
(0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 0
(0) None used
(1) Police did not indicate restraint use
(2) Shoulder belt
(3) Lap belt
(4) Lap and shoulder belt
(5) Belt used, type not specified
(6) Child safety seat
(7) Other or automatic restraint (specify): _____
(8) Restrained, type unknown
(9) Police indicated "unknown"

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position: 0
    - (0) No head restraints
    - (1) Integral—no damage
    - (2) Integral—damaged during accident
    - (3) Adjustable—no damage
    - (4) Adjustable—damaged during accident
    - (5) Add-on—no damage
    - (6) Add-on—damaged during accident
    - (8) Other (specify): _____
    - (9) Unknown

26. Seat Type (this Occupant Position): 05
    - (00) Occupant not seated or no seat
    - (01) Bucket
    - (02) Bucket with folding back
    - (03) Bench
    - (04) Bench with separate back cushions
    - (05) Bench with folding back(s)
    - (06) Split bench with separate back cushions
    - (07) Split bench with folding back(s)
    - (08) Pedestal (i.e., column supported)
    - (09) Other seat type (specify): _____
    - (10) Box mounted seat (i.e., van type)
    - (99) Unknown

27. Seat Performance (this Occupant Position): 1
    - (0) Occupant not seated or no seat
    - (1) No seat performance failure(s)
    - (2) Seat adjusters failed
    - (3) Seat back folding locks or "seat back" failed (specify): _____
    - (4) Seat track/anchors failed
    - (5) Deformed by impact of occupant
    - (6) Deformed by passenger compartment intrusion (specify): _____
    - (7) Combination of above (specify): _____
    - (8) Other (specify): _____
    - (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0
(000) No child safety seat
Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify):
_____
(998) Unknown make/model
(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat
(7) Other type child safety seat (specify):
_____
(8) Unknown child safety seat type
(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0
(00) No child safety seat

Designed for Rear Facing for This Age/Weight
(01) Rear facing
(02) Forward facing
(08) Other orientation (specify):
_____
(09) Unknown orientation

Designed For Forward Facing for This Age/Weight
(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):
_____
(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):
_____
(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 0

32. Child Safety Seat Shield Usage 0 0

33. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA31-OA33.
(00) No child safety seat

Not Designed With Harness/Shield/Tether
(01) After market harness/shield/tether added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market harness/shield/tether added
(09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 3

(0) O - No injury
(1) C - Possible injury
(2) B - Nonincapacitating injury
(3) A - Incapacitating injury
(4) K - Killed
(5) U - Injury, severity unknown
(6) Died prior to accident
(9) Unknown

35. Treatment - Mortality 3

(0) No treatment
(1) Fatal
(2) Fatal - ruled disease (specify):

_____

Nonfatal
(3) Hospitalization
(4) Transported and released
(5) Treatment at scene - nontransported
(6) Treatment later
(8) Treatment - other (specify):

_____

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

(0) Not treated at a medical facility
(1) Trauma center
(2) Hospital
(3) Medical clinic
(4) Physician's office
(5) Treatment later at medical facility
(8) Other (specify):

_____

(9) Unknown

37. Hospital Stay 0 6

(00) Not Hospitalized
6 Code the number of days (up through 60) that the occupant stayed in hospital.
(61) 61 days or more
(99) Unknown

38. Working Days Lost 0 1

____Code the number of days (up through 60) that the occupant lost from work due to the accident
(00) No working days lost
(61) 61 days or more
(62) Fatally injured
(97) Not working prior to accident
(99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER

39. Time to Death 0 0

____Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 +n up through 30 days = 60)
(00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

40. 1st Medically Reported Cause of Death 0 0

41. 2nd Medically Reported Cause of Death 0 0

42. 3rd Medically Reported Cause of Death 0 0

____Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
(00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

_____

(97) Other result (includes fatal ruled disease) (specify):

_____

(99) Unknown

43. Number of Recorded Injuries for This Occupant 0 8

8 Code the actual number of injuries recorded for this occupant.
(00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

AUTOMATIC BELT SYSTEM

44. Automatic (Passive) Belt System Availability/ Function — 0
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional
(4) Automatic belts destroyed or rendered inoperative
(9) Unknown

45. Automatic (Passive) Belt System Use — 0
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
(3) Automatic belt use unknown
(9) Unknown

46. Automatic (Passive) Belt System Type — 0
(0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

47. Proper Use of Automatic (Passive) Belt System — 0
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly
(3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):
(8) Other improper use of automatic belt system (specify):
(9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident — 0
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):
(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify):
(9) Unknown

49. Seat Orientation (this Occupant Position) — 1
(0) Occupant not seated or no seat
(1) Forward facing seat
(2) Rear facing seat
(3) Side facing seat (inward)
(4) Side facing seat (outward)
(8) Other (specify):
(9) Unknown

Check the Primary Source Used In Determining Belt Use.

[ ] Not equipped/not available/destroyed or rendered inoperative
[✓] Vehicle inspection
[ ] Official injury data
[ ] Driver/occupant interview
[ ] Other (specify):
[ ] Unknown if belt used

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION? NO [ ] YES [✓]

UPDATE CANDIDATE? NO [✓] YES [ ]

STOP — VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER

TRAUMA DATA

50. Glasgow Coma Scale (GCS) Score (at Medical Facility) 15
    (00) Not injured
    (01) Injured - not treated at medical facility
    (02) No GCS Score at medical facility
    (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
    (97) Injured, details unknown
    (99) Unknown if injured

51. Was the Occupant Given Blood? 1
    (1) No - blood not given
    (2) Yes - blood given
    (specify units):_____
    (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO_3 01
    (00) Not injured
    (01) Injured, ABGs not measured or reported
    (02-50) Code the actual value of the HCO_3
    (96) ABGs reported , HCO_3 unknown
    (97) Injured, details unknown
    (99) Unknown if injured

BELT USE DETERMINATION

53. Primary Source of Belt Use Determination 1
    (0) Not equipped/not available/destroyed or rendered inoperative
    (1) Vehicle inspection
    (2) Official injury data
    (3) Driver/occupant interview
    (8) Other (specify):_____
    (9) Unknown if belt used

Appendix K:

NASS CDS Occupant Injury Form:

Vehicle #2 Driver

U.S. Department of Transportation
National Highway Traffic Safety Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	10	3. Vehicle Number	02
2. Case Number - Stratum	9409	4. Occupant Number	01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	A.I.S. - 90 Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
Bimalleolar Fxs ® ankle 1st	5. 2	6. 8	7. 5	8. 16	9. 12	10. 2	11. 1	12. 56	13. 1	14. 1	15. 05
Dislocation ® ankle 2nd	16. 2	17. 8	18. 5	19. 02	20. 10	21. 2	22. 1	23. 56	24. 1	25. 1	26. 05
Bimalleolar Fxs (L) ankle 3rd	27. 2	28. 8	29. 5	30. 16	31. 12	32. 2	33. 2	34. 56	35. 1	36. 1	37. 05
Laceration muscle (L) leg 4th	38. 2	39. 8	40. 4	41. 06	42. 00	43. 2	44. 2	45. 59	46. 2	47. 1	48. 05
Laceration proximal (L) leg 5th	49. 2	50. 8	51. 9	52. 06	53. 02	54. 1	55. 2	56. 09	57. 1	58. 1	59. 04
Abrasion (L) knee 6th	60. 3	61. 8	62. 9	63. 02	64. 02	65. 1	66. 2	67. 09	68. 1	69. 1	70. 04
Abrasions ® lower extremity + knee 7th	71. 3	72. 8	73. 9	74. 02	75. 02	76. 1	77. 1	78. 09	79. 1	80. 1	81. 04
Lacerations ® lower extremity 8th	82. 3	83. 8	84. 9	85. 06	86. 00	87. 1	88. 1	89. 09	90. 2	91. 1	92. 04
9th	93. __	94. __	95. __	96. ___	97. ___	98. __	99. __	100. ___	101. __	102. __	103. ___
10th	104. __	105. __	106. __	107. ___	108. ___	109. __	110. __	111. ___	112. __	113. __	114. ___

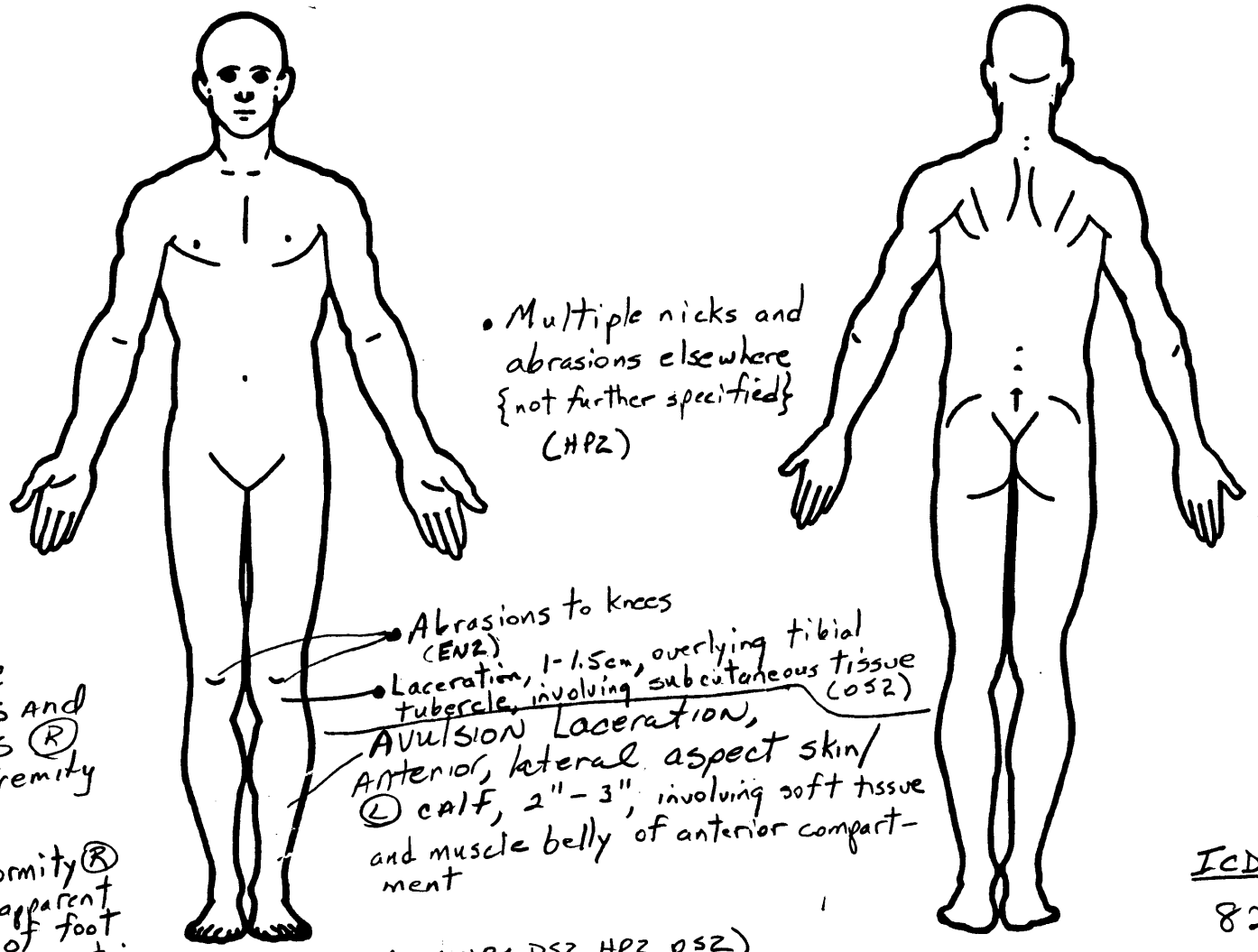
OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	—	—	—	— —	— —	—	—	— —	—	—	— —
12th	—	—	—	— —	— —	—	—	— —	—	—	— —
13th	—	—	—	— —	— —	—	—	— —	—	—	— —
14th	—	—	—	— —	— —	—	—	— —	—	—	— —
15th	—	—	—	— —	— —	—	—	— —	—	—	— —
16th	—	—	—	— —	— —	—	—	— —	—	—	— —
17th	—	—	—	— —	— —	—	—	— —	—	—	— —
18th	—	—	—	— —	— —	—	—	— —	—	—	— —
19th	—	—	—	— —	— —	—	—	— —	—	—	— —
20th	—	—	—	— —	— —	—	—	— —	—	—	— —
21st	—	—	—	— —	— —	—	—	— —	—	—	— —
22nd	—	—	—	— —	— —	—	—	— —	—	—	— —
23rd	—	—	—	— —	— —	—	—	— —	—	—	— —
24th	—	—	—	— —	— —	—	—	— —	—	—	— —
25th	—	—	—	— —	— —	—	—	— —	—	—	— —

xx1= Original Medical Facility xx2= Hospitalized Facility

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



• Multiple nicks and abrasions elsewhere {not further specified} (HP2)

• Abrasions to knees (EN2)

• Laceration, 1-1.5cm, overlying tibial tubercle, involving subcutaneous tissue (OS2)

• Avulsion Laceration, Anterior, lateral aspect skin/ (L) calf, 2"-3", involving soft tissue and muscle belly of anterior compartment

(EN1, HP1, DS2, HP2, OS2)

• Multiple scratches and abrasions (R) lower extremity (HP2)

• Obvious deformity (R) ankle with apparent dislocation of foot and ankle @ mortise joint (HP1, HP2)

ICD-9-CM
825.21

National Accident Sampling System-Crashworthiness Data System: Occupant Injury Form

SOURCE OF INJURY DATA

OFFICIAL

(1) Autopsy records with or without hospital/medical records
(2) Hospital/medical records other than emergency room (e.g., discharge summary)
(3) Emergency room records only (including associated X-rays or other lab reports)
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL

(5) Lay coroner report
(6) E.M.S. personnel
(7) Interviewee
(8) Other source (specify): _____
(9) Police

INJURY SOURCE

FRONT

(01) Windshield
(02) Mirror
(03) Sunvisor
(04) Steering wheel rim
(05) Steering wheel hub/spoke
(06) Steering wheel (combination of codes 04 and 05)
(07) Steering column, transmission selector lever, other attachment
(08) Add on equipment (e.g., CB, tape deck, air conditioner)
(09) Left instrument panel and below
(10) Center instrument panel and below
(11) Right instrument panel and below
(12) Glove compartment door
(13) Knee bolster
(14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
(15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
(16) Driver side air bag compartment cover
(17) Passenger side air bag compartment cover
(18) Windshield reinforced by exterior object (specify): _____
(19) Other front object (specify): _____

LEFT SIDE

(20) Left side interior surface, excluding hardware or armrests
(21) Left side hardware or armrest
(22) Left A (A1/A2)-pillar
(23) Left B-pillar
(24) Other left pillar (specify): _____
(25) Left side window glass or frame
(26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(27) Other left side object (specify): _____
(28) Left side window sill

RIGHT SIDE

(30) Right side interior surface, excluding hardware or armrests
(31) Right side hardware or armrest
(32) Right A (A1/A2)-pillar
(33) Right B-pillar
(34) Other right pillar (specify): _____
(35) Right side window glass or frame
(36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
(37) Other right side object (specify): _____
(38) Right side window sill

INTERIOR

(40) Seat, back support
(41) Belt restraint webbing/buckle
(42) Belt restraint B-pillar or door frame attachment point
(43) Other restraint system component (specify): _____
(44) Head restraint system
(45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
(46) Other occupants (specify): _____
(47) Interior loose objects
(48) Child safety seat (specify): _____
(49) Other interior object (specify): _____

ROOF

(50) Front header
(51) Rear header
(52) Roof left side rail
(53) Roof right side rail
(54) Roof or convertible top

FLOOR

(56) Floor (including toe pan)
(57) Floor or console mounted transmission lever, including console
(58) Parking brake handle
(59) Foot controls including parking brake

REAR

(60) Backlight (rear window)
(61) Backlight storage rack, door, etc.
(62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

(65) Hood
(66) Outside hardware (e.g., outside mirror, antenna)
(67) Other exterior surface or tires (specify): _____
(68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

(70) Front bumper
(71) Hood edge
(72) Other front of vehicle (specify): _____
(73) Hood
(74) Hood ornament
(75) Windshield, roof rail, A-pillar
(76) Side surface
(77) Side mirrors
(78) Other side protrusions (specify) _____
(79) Rear surface
(80) Undercarriage
(81) Tires and wheels
(82) Other exterior of other motor vehicle (specify): _____
(83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

(84) Ground
(85) Other vehicle or object (specify) _____
(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle
(91) Flying glass
(92) Other noncontact injury source (specify): _____
(93) Air bag exhaust gases
(97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

(1) Certain
(2) Probable
(3) Possible
(9) Unknown

DIRECT/INDIRECT INJURY

(1) Direct contact injury
(2) Indirect contact injury
(3) Noncontact injury
(7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

Body Region

(1) Head
(2) Face
(3) Neck
(4) Thorax
(5) Abdomen
(6) Spine
(7) Upper Extremity
(8) Lower Extremity
(9) Unspecified

Type of Anatomic Structure

(1) Whole Area
(2) Vessels
(3) Nerves
(4) Organs (includes muscles/ligaments)
(5) Skeletal (includes joints)
(6) Head - LOC
(9) Skin

Specific Anatomic Structure

Whole Area
(02) Skin - Abrasion
(04) Skin - Contusion
(06) Skin - Laceration
(08) Skin - Avulsion
(10) Amputation
(20) Burn
(30) Crush
(40) Degloving
(50) Injury - NFS
(90) Trauma, other than mechanical

Head - LOC
(02) Length of LOC
(04, 06, 08) Level of Consciousness
(10) Concussion

Spine
(02) Cervical
(04) Thoracic
(06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

Abbreviated Injury Scale

(1) Minor injury
(2) Moderate injury
(3) Serious injury
(4) Severe injury
(5) Critical injury
(6) Maximum (untreatable)
(7) Injured, unknown severity

Aspect

(1) Right
(2) Left
(3) Bilateral
(4) Central
(5) Anterior
(6) Posterior
(7) Superior
(8) Inferior
(9) Unknown
(0) Whole region

OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

✓ No

__ Yes

(EN1, EN2)

Blood Alcohol Level (mg/dl)

BAL = ____

Glasgow Coma Scale Score

GCSS = 15

(EN1)

Units of Blood Given

Units = ____

Arterial Blood Gases

pH = __.__

PO_2 = ____

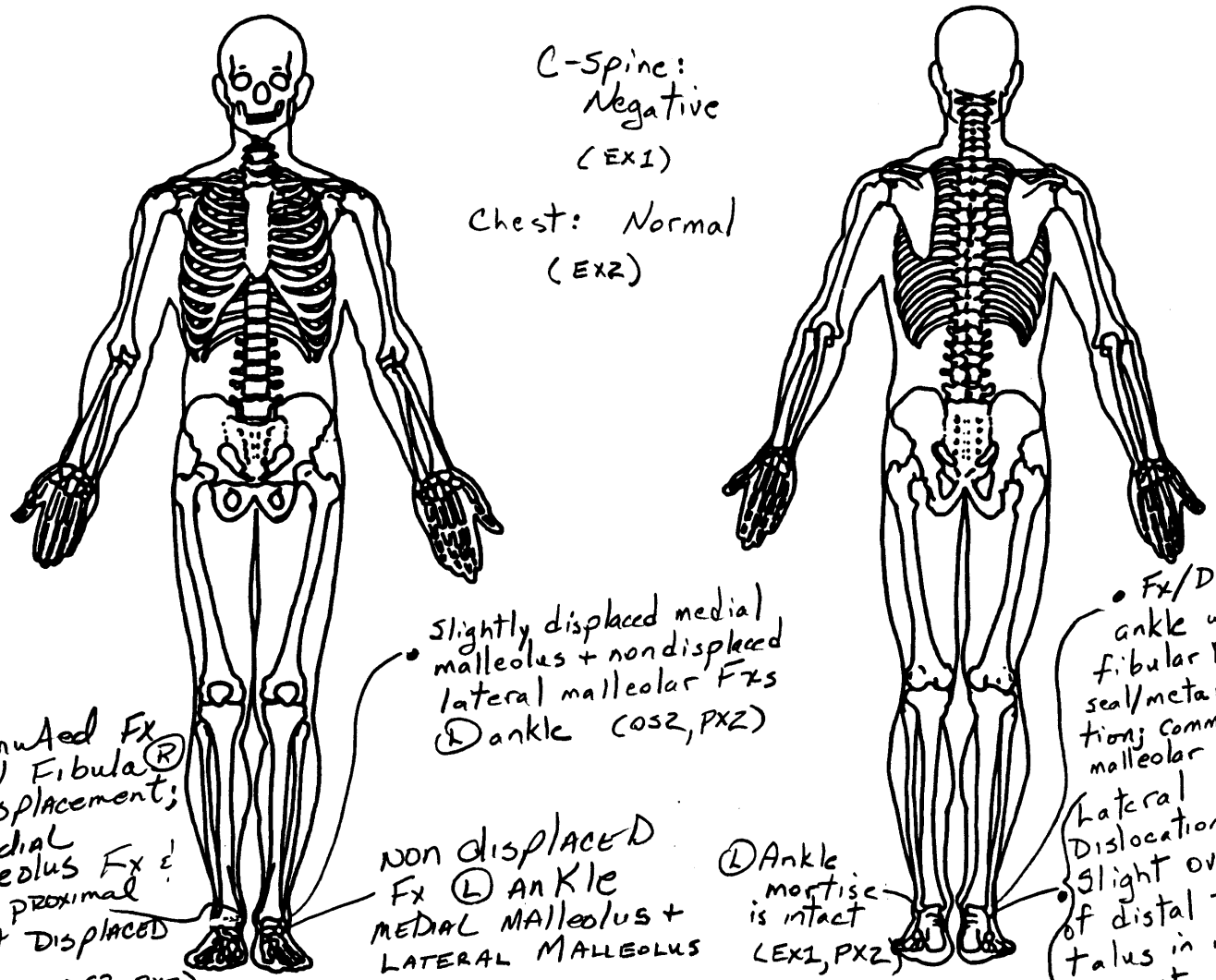
PCO_2 ____

HCO_3 ____

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

C-Spine: Negative (EX1)

Chest: Normal (EX2)



Comminuted Fx distal Fibula (R) w/displacement; (R) medial malleolus Fx & MAIN proximal shaft DISPLACED (HP1, EN2, DS2, PX2)

Slightly displaced medial malleolus + nondisplaced lateral malleolar Fxs (L) ankle (OS2, PX2)

NON displaced Fx (L) ANKLE MEDIAL MALLEOLUS + LATERAL MALLEOLUS (HP1, EX1, EN2, DS2)

(L) Ankle mortise is intact (EX1, PX2)

• Fx/Dislocation (R) ankle with comminuted fibular Fx @ diaphyseal/metaphyseal junction; comminuted medial malleolar Fx (R) ankle (OS2)

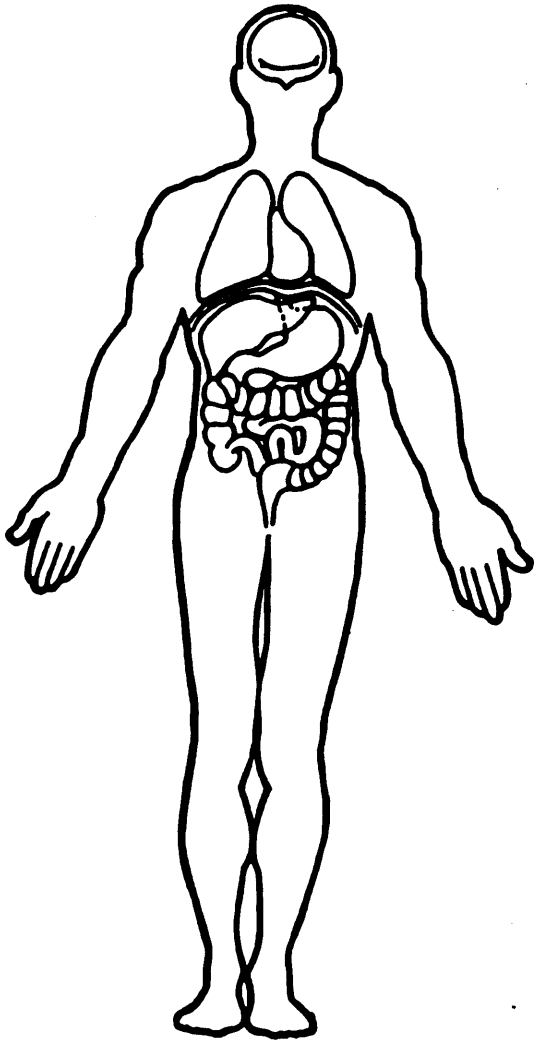
Lateral Dislocation (R) ankle; slight overriding of distal tibia and talus in medial aspect (EX1, EN2, DS2, HP2)

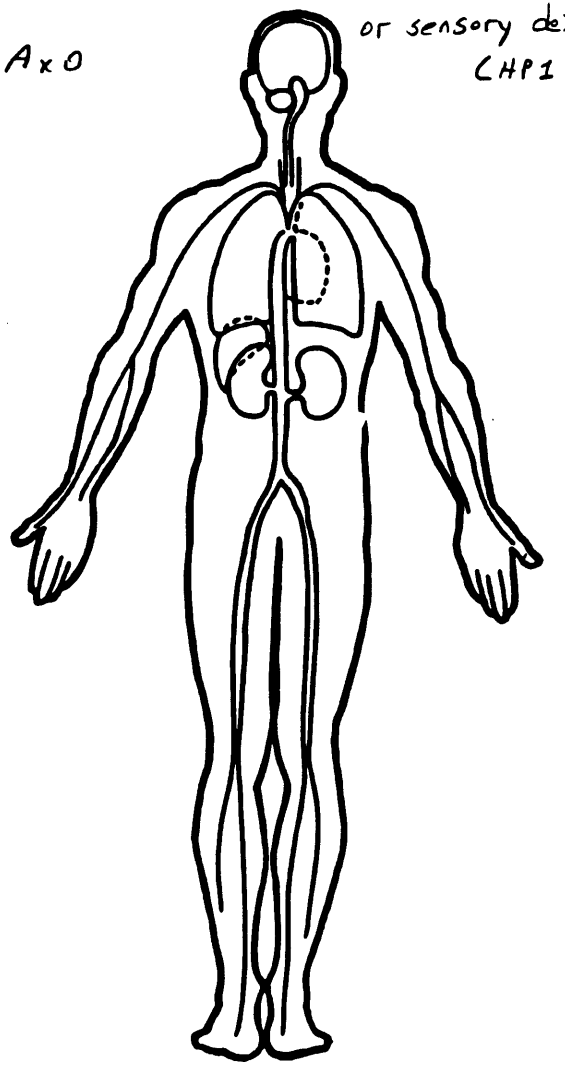
OFFICIAL INJURY DATA – INTERNAL INJURIES

- Denies head or neck pain (EN2)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

- No c/o pain voiced (EN1)
- No Nausea or Vomiting (EN1)
- Denies LOC, AxO (HP2)
- Oriented to person, place, & time; no obvious motor or sensory deficits (HP1)





Hospital Medical Records

{Initial Treatment Facility}

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Transfer

HOSPITAL

ADMISSION

PATIENTS LAST NAME / FIRST NAME / MIDDLE NAME	MAIDEN NAME	BIRTH DATE	AGE	COST CENTER	ROOM-BED	ADM FROM
[redacted]	[redacted]	[redacted]	28Y			

STREET ADDRESS / RR OR BOX NO	CITY	STATE	ZIP	TELEPHONE NO	RELIGION	OCCUPATION
[redacted]		KY [redacted]		[redacted]		

SOC. SEC. NO	SEX	RACE	MARITAL STATUS	COUNTY	PT CL	TYPE PT	FSC	CYCLE CODE
[redacted]	F	W	M	[redacted]		02	05	

ADMISSION DATE & TIME	DISCHARGE DATE & TIME	DAYS STAY	ATTENDING PHYSICIAN	BILLING NO	CONSULTING PHYSICIAN
[redacted] 94 [redacted]:00			[redacted]	[redacted]	

NEXT OF KIN	RELATIONSHIP	ADDRESS	TELEPHONE	MEDICARE OR MEDICAID NO
[redacted]				

READMIT CODE	ADMISSION CLERK	PATIENTS EMPLOYER	EMPLOYERS ADDRESS	EMPLOYER'S CODE
	[redacted]	HOUSEWIFE		[redacted]

NOTIFY IN EMERGENCY	RELATIONSHIP	GUARANTOR OF ACCOUNT	ADDRESS	TELEPHONE
[redacted]	SPOUSE			[redacted]

INSURANCE

1	M'CARE	MEDICARE NO.	PART ☐ A ☐ B	NAME AS APPEARS ON MEDICARE CARD	EFF. DATE
2	M'CAID	MEDICAID NO	VALID CARD SEEN	CASE NAME	EFF. DATE
3	BLUE CROSS	ID OR CERT. NO	GROUP #	SUBSCRIBER	REL. TO
4	COM'L INS.	POLICY NO [redacted]	INS. CARRIER AND ADDRESS [redacted]	SUBSCRIBER [redacted]	REL. TO
5	WORK COMP		EMPLOYER AT TIME OF ACCIDENT	ADDRESS	DATE OF INJURY
6	OTHER		MVA		

CURRENT HISTORY

Y		N
Y	COR	N
Y	RESP	N
Y	NEUR	N
Y	DM	N
Y	PREG	N
Y	BP	N
Y	GU	N
Y	MED	N
Y	RX	N

PATIENT HEALTH DATA

MODE OF ARRIVAL: Self / Ambulance

ADMITTED PER: Walk / W. C / Cart / Carried

ALLERGIES ____

T ____ P ____ B/P ____ WT. ____

COMMENTS: ____

ARRIVED AT ____ DEPT. AT ____ AM/PM
HOW PT. TOLERATED PROCEDURE ____
DISCHARGED AT ____ AM/PM
SIGNATURE:

ARRIVED AT ____ DEPT. AT ____ AM/PM
HOW PT. TOLERATED PROCEDURE ____
DISCHARGED AT ____ AM/PM
SIGNATURE:

ARRIVED AT ____ DEPT. AT ____ AM/PM
HOW PT. TOLERATED PROCEDURE ____
DISCHARGED AT ____ AM/PM
SIGNATURE:

ARRIVED AT ____ DEPT. AT ____ AM/PM
HOW PT. TOLERATED PROCEDURE ____
DISCHARGED AT ____ AM/PM
SIGNATURE:

TIME OF DISCHARGE ____ AM/PM

DISCHARGED VIA ( ) WALK ( ) W/C ( ) CART ( ) CARRIED

MODE OF DISCHARGE ( ) SELF ( ) AMBULANCE

DISCHARGE INSTRUCTIONS

825.21

825.21

PATIENT SIGNATURE ____

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PRE-HOSPITAL CARE

- ☐ O_2 ____ L/M NC or MASK
- ☐ Airway
- ☐ ET Tube
- ☐ Ambu
- ☐ Home Care
- ☐ CPR
- ☐ Monitor
- ☐ Mast Suit
- ☐ Not Applicable
- ☑ Spineboard
- ☑ C-Collar
- ☑ Field IV Solution NS
- Amt Infused ______ Site ____
- ☐ Splint RA LA RL LL

Physician: [redacted] Room Number [redacted]

Date: [redacted]/94 Triage time 0935

Brought by ☐ Self ☐ Family ☑ Ambulance ☐ Other

Priority Class: I (II) III IV

Age: 26 Sex: F DOB: [redacted] LNMP: 1 mo ago Pregnant: Y (N)

Allergies: Ø

Tetanus Injection within last 5 years Y (N)

Chief Complaint: MVA, ? fx of (L) extremities

Past Medical History Ø

Home Meds: Ø

Ins ER via ambulance p̄ 2 car MVA, unrestrained ~~passenger~~ [redacted] driver of vehicle, NS via IV, BS hypoactive, no resp. distress, (R) foot pedal pulses weaker than (L) pedal pulses, (R) foot toes cool to touch - [redacted]

CONTINUING ASSESSMENT/INTERVENTIONS/EVALUATIONS

TIME	S_aO_2	TEMP	P	R	BP	NSG DX#	
0935	98		76	24	120/60		

Continued - no % pain voiced 2 dried skin patches to ↑ (R) (L) girds, 3-4cm in circumference, (+) skin tear to ~~this~~ area these regions, no % pain to these regions, drsg to (L) mid anterior tib fib area, 2-3 inch puncture wound c̄ minimal bleeding [redacted]

MEDICATION AND PROCEDURE DOCUMENTATION

TIME & INITIALS	MEDICATION/PROCEDURES	DOSE	ROUTE	SITE	RESPONSE
[redacted] 1100	Stadol 1mg		IVP		

TIME & INITIALS	IV STARTED	SIZE	FLUID	# OF STICKS
IV IID				
IV IID				
IV IID				

INTAKE OUTPUT

CHEMSTICK

IDENTIFY INITIALS BY SIGNATURE AND TITLE

1 [redacted] RN 2 3 4

PROGRESS NOTES

Name	Attending Physician	Room No.	Hosp. No.

Date	Notes Should Be Signed by Physician

[redacted]94 ER NOTE

S: The patient is a 28 y/o white female who was involved in a 2 car MVA. She was driving and had a head-on collision with the other vehicle. She was brought to the ER by ambulance after paramedics extracted her from the vehicle. Her primary complaint was pain in her right foot.

Past Medical History: Unremarkable.

Serious illnesses: None.

Medications: None regular.

Allergies: None known.

Family History: Nothing significant for this event.

O: Physical Exam:

General: A well-developed, young white female who was in amazingly little distress due to the injuries she has had.

HEENT: Normocephalic. PERRLA. Fundi normal.

Neck: Examined after cervical spine films obtained and revealed no nuchal rigidity. No JVD. No bruits. No abnormal masses. No thyroidamegaly.

Chest: Normal to inspection. Lungs are clear.

Heart: Regular rhythm without murmur, gallop, or rub.

Abdomen: Soft. Non-tender. No masses. No organomegaly. Bowel sounds are normal. No CVA tenderness.

External Genitalia: Normal.

Extremities: There is obvious deformity of the right ankle with apparent dislocation of the foot and ankle at the ankle mortise joint. Fracture is suspected. There is an avulsion laceration over the anterior lateral aspect of the left calf. Pulses in both lower extremities are 2+ and equal. The extremities are warm.

Skin: Laceration as noted. No other abnormalities.

Neurological: She is oriented to person, place, and time. No obvious motor or sensory deficits.

A: 1. Fracture dislocation, right ankle. 2. Non-displaced fractures, left ankle.

P: Transfer to Dr. [redacted], orthopedic surgeon at [redacted] Hospital.

DATE: _____ SIGNED: _____

[redacted], M.D.

DD: [redacted]94 DT: [redacted]94

Progress Notes

NURSING ASSESSMENT/DATA BASE
FILL IN OR CIRCLE APPROPRIATE TO CHIEF COMPLAINT

PEDIATRIC

WT: IMMUNIZATIONS UP TO DATE Y N

AFFECT

DEVELOPMENTALLY APPROPRIATE FOR AGE Y N

IF NO, DESCRIBE N/A

VENTILATION

RESPIRATIONS: (Regular) Shallow Labored Retractions
BREATH SOUNDS: (Clear) Crackles Coarse Wheezes Expir-Inspir
COUGH: Y (N) Productive Y - N Sputum
NOT APPLICABLE

CIRCULATION

SKIN TYPE: (Warm) Cool (Dry) Moist Other (R toes cool
SKIN COLOR: (Normal) Cyanotic Pale Other
NAILBEDS: (Pink) Cyanotic Capillary Refill Other

	Right	Left
EDEMA: (Absent) Pedal Other PULSES Radial	Y - N	Y - N
Pedal	(Y) N	(Y) - N

COGNITION COMMUNICATION

NEUROLOGICAL: Glascow Coma Scale E M V Total
Description
SPEECH: (Clear) Slurred Rambling Aphasic
BEHAVIOR: (Cooperative) Uncooperative Confused Unresponsive
Restless Combative Crying Anxious Other
NOT APPLICABLE

MOBILITY COMFORT

SKIN INTEGRITY: Burns Bruises Laceration Abrasion Rash Decubitus
Description
PAIN: Location 2-3" Puncture wound
Quality/Duration/Pattern (L) ant. thigh
Motion/Sensation
Additional Comments
GAIT: Steady Unsteady (Unable)

NUTRITION FLUID STATUS ELIMINATION

Nausea (Q) Vomiting (Q) Diarrhea Constipation
Bowel Sounds Skin Turgor Mucous Membranes
Bleeding Source
Dysuria Hematuria Describe
NOT APPLICABLE

GLASCOW COMA SCALE

EYE OPENING	MOTOR RESPONSE	VERBAL RESPONSE	
~~4-Spontaneous~~	(6-Obeys Commands)	3-Flexion	(5-Oriented) 3-Inappropriate Words
3-To Speech	5-Localizes Pain	2-Extension	4-Confused 2-Incomprehensible Sounds
2-To Pain	4-Withdraw	1-None	Conversation 1-None
1-None			

#	NURSING DIAGNOSIS	INITIAL INTERVENTION
1	INEFFECTIVE AIRWAY CLEARANCE	AIRWAY
2	INEFFECTIVE BREATHING PATTERNS	OXYGEN
3	IMPAIRED GAS EXCHANGE	MONITOR
		ALARMS ON MONITOR V S
4	ALTERED CARDIAC OUTPUT	NIBP MONITOR
~~5~~	~~ALTERED TISSUE PERFUSION~~	
6	IMPAIRED VERBAL COMMUNICATION	ALLERGY BAND ON
7	SENSORY/PERCEPTUAL ALTERATIONS	
8	ALTERED THOUGHT PROCESSES	SIDERAILS UP
~~9~~	~~POTENTIAL FOR INJURY~~	CALL BELL IN REACH
~~10~~	~~ANXIETY/FEAR~~	SOFT RESTRAINTS
~~11~~	~~POTENTIAL FOR VIOLENCE SELF-~~	
12	DIRECTED OR DIRECTED AT OTHERS	
		ICE
13	IMPAIRED PHYSICAL MOBILITY	ELEVATION
~~14~~	~~PAIN ACUTE OR CHRONIC~~	SLING/SPLINT
~~15~~	~~IMPAIRED TISSUE INTEGRITY~~	C-SPINE IMMOBILIZATION
~~16~~	~~POTENTIAL FOR INFECTION~~	POSITION OF COMFORT
		WOUND CLEANSED
		DRESSING
17	FLUID VOLUME DEFICIT/EXCESS POTENTIAL FOR	
18	CONSTIPATION/DIARRHEA	NPO
19	ALTERATION IN URINARY ELIMINATION	I&O
20	HYPOTHERMIA/HYPERTHERMIA	THERMAL MEASURES
21	IMPAIRED HOME MAINTENANCE MANAGEMENT	PAD COUNT
		HEME TEST +
22	ALTERED FAMILY PROCESSES	SOURCE
23	INEFFECTIVE COPING	
24	NONCOMPLIANCE (SPECIFY)	SOCIAL WORKER CALLED
~~25~~	~~SELF CARE DEFICIT~~	
~~26~~	~~POST TRAUMA RESPONSE~~	CRISIS CALLED

TIME SIGNATURE

DISCHARGE - TRANSFER ASSESSMENT - FILL IN OR CIRCLE WHERE APPROPRIATE RELATIVE TO FINAL DIAGNOSIS

BREATH SOUNDS
RESPIRATIONS Regular Shallow Labored Retractions
CARDIAC MONITOR PATTERN

		Right	Left	
PULSES	Radial	Y - N	Y - N	Edema
	Pedal	Y - N	Y - N	

NEUROLOGICAL Glascow Coma Scale E M V Total
BEHAVIOR Cooperative Uncooperative Confused Unresponsive
Restless Combative Crying Other
PAIN
O
SKIN Warm Dry Cool Moist Normal Pale Cyanotic Other
SKIN INTEGRITY Wounds
ASSESSMENT UNCHANGED ✓

O Improved/Satisfactory O Stable O Guarded Critical
O DOA O Expired
DISPOSITION AT TIME OF DISCHARGE
O Admit IP to Room per wheelchair cart ambulatory
O Admit OP to Room per wheelchair cart ambulatory
BELONGINGS
Old Records to Floor Yes - No
ADMISSION/TRANSFER IV Oxygen Monitor
O Home/Nursing Home O AMA
O Custody of Law Enforcement
O Transfer to per ambulance family vehicle
TIME SIGNATURE
1115 [redacted] RN

X-RAY REQUEST

TRANSPORT	EXAMINATION REQUESTED
☐ WALK	1) C-Spine
☐ WC	2) (R) Leg
☒ STRETCHER	3) (L) Leg
☐ PORTABLE	4)

BIRTHDATE	IS PATIENT PREGNANT OR POSSIBLY PREGNANT ☐ YES ☐ NO	AGE	SEX	PREVIOUS RADIOLOGY STUDIES	ORDERING PHYSICIAN [redacted]
☐ INPATIENT	ADMITTING DX: MVA			CHIEF COMPLAINT PERTINENT TO EXAM ORDERED:	
☐ OUTPATIENT					
☒ E.R. PATIENT	TECHNICIAN [redacted]	REQUESTED BY: [redacted]		PATIENT FILE NUMBER [redacted]	DATE [redacted] 94

CERVICAL SPINE, AP & LATERAL VIEWS: No fracture or subluxation seen. The disc spaces and vertebral heights are within normal limits. The odontoid and spinous processes are unremarkable.

IMPRESSION: Negative cervical spine.

RIGHT LOWER LEG: There is comminuted fracture of the distal fibula with medial angulation and displacement of the distal major fragment laterally. The medial malleolus is fractured and the main proximal shaft is displaced medially losing the contour of the ankle mortise. There is slight overriding of the distal tibia and talus in the medial aspect. Marked soft tissue swelling is seen.

LEFT LOWER LEG: There is medial and lateral malleolar fracture. Ankle mortise is intact.

[redacted] M.D. MD
RADIOLOGIST

[redacted]
TRANSCRIBED BY

[redacted]/94
DATE

X-RAY REQUEST REPORT

CHART COPY

- PHYSICIAN'S ED RECORD

PRESENT ILLNESS

PAST MEDICAL HISTORY:

PHYSICAL EXAM

ORDERS [redacted]	LAB	☐ CBC ☐ PROFILE 7 ☐ MULTICHEM ☐ CARDIAC WORKUP ☐ ETOH ☐ DRUG SCREEN ☐ QUALITATIVE HCG	☐ UA ☐ DIGOXIN ☐ THEOPHYLLIN ☐ URINE PREGNANCY TEST ☐ URINE C&S ☐ THROAT C&S ☐ SPUTUM C&S	☐ STREP SCREEN ☐ MONOSPOT ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____	CP X-RAY	☐ ABG ☐ EKG ☐ PULSE OX ☐ CXR ☐ C-SPINE ☐ T-SPINE ☐ LS-SPINE	☐ SKULL ☐ _____RIBS ☐ KUB ☐ ABD - FLAT & UPRIGHT ☐ _____ ☐ _____ ☐ _____
TREATMENT	☐ CARDIAC MONITOR ☐ O_2 at _____ ☐ IID ☐ IVF of _____ AT _____CC/HR ☐ OTHER:						

EVALUATION AND DIAGNOSIS

PLAN/DISPOSITION

☐ DISCHARGE WITH INSTRUCTIONS ☐ ADMIT IP OP ☐ RELEASE BODY TO FUNERAL HOME OF FAMILY'S CHOICE
☐ TRANSFER TO [redacted] SERVICES OF [redacted] PER ☐ AMBULANCE ☐ FAMILY CAR

DATE [redacted]/94 PHYSICIAN SIGNATURE [redacted] RN

Trauma Center Medical Records

{Facility to which Occupant was transported by Ambulance}

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HOSPITAL , Kentucky

REGISTRATION RECORD

ENT NAME / ADDRESS [redacted] KY [redacted]	ACCOUNT NO [redacted]	ROOM / BED	STATUS REG	LOCATION / SERVICE EE EE	MEDICAL RECORD NO [redacted]
	DATE OF BIRTH [redacted]	AGE 25	SEX F	MAR STATUS M	RELIGION
PHONE [redacted]	PERSON TO NOTIFY / ADDRESS [redacted] KY				RELATIONSHIP
SOCIAL SECURITY NO	PHONE [redacted]		WORK PHONE		
EMPLOYER UNEMPLOYED	NEXT OF KIN / ADDRESS [redacted] KY				RELATIONSHIP
GUARANTOR'S NAME / ADDRESS [redacted] KY [redacted]	PHONE [redacted]		WORK PHONE		
PHONE [redacted]					
RELATIONSHIP HUSBAND					
GUAR EMPLOYER UNEMPLOYED					
FINANCIAL CLASS [redacted]					
INSURANCE CARRIER [redacted]	POLICY NUMBER		COVERAGE NUMBER		SUBSCRIBER / INSURED NAME [redacted]

ACCIDENT / OCCURRENCE AUTO ACCIDENT	REASON FOR VISIT ER VISIT		
ACCIDENT TIME [redacted] 94 0930	COMMENTS		
ADMI[redacted] TIME [redacted] 94 1301	ADMITTING PHYSICIAN [redacted]	ATTENDING PHYSICIAN [redacted]	USER [redacted]
DISCHARGE DATE/TIME [redacted] 1994	DATE/TIME ADMITTED AS INPATIENT	ER PHYSICIAN	

] LIVING WILL ☐ HEALTHCARE SURROGATE DESIGNATION ☐ DURABLE POWER OF ATTORNEY FOR HEALTHCARE DECISIONS ☒ NONE

DISCHARGED ☐
] HOME OR SELF CARE
] ACUTE CARE HOSPITAL
] SKILLED CARE
] INTERMEDIATE CARE
] PERSONAL CARE
] HOME HEALTH
] LEFT AMA
] REHABILITATION
] EMOTIONAL WELLNESS UNIT

EXPIRED ☐ DATE/TIME _____

AUTOPSY ☐ YES ☐ NO

CORONERS CASE ☐ YES ☐ NO

CHART

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HOSPITAL , Kent.

ER ADMISSION RECORD

ARRIVED VIA ☐ AMBULANCE ☐ WHEELCHAIR ☐ AMBULATORY ☐ CARRIED

PHYSICIAN | TIME CALLED | TIME CONTACTED | TIME ARRIVED

EMPLOYMENT RELATED YES ☐ NO

TREATMENT PRIOR TO ARRIVAL

PHYSICIAN [redacted] | TIME CALLED 1305 | TIME CONTACTED 1305 | TIME ARRIVED

DRUG SCREEN REQUIRED YES ☐ NO ☐

NS X2 LAC R Hand C-collar. Stabilized

INFORMANT ☑ SELF ☐ FAMILY ☐ OTHER

PRESENT HISTORY & NURSING ASSESSMENT TIME 1300 ROOM NO. [redacted]

☐ NOTIFIED ____ AM PM ☐ DR ☐ CORONER ☐ POLICE

Pt transferred via [redacted] [redacted] pillow splints to lower legs ... movement ... capillary refill ... Abrasions ... knees ... [illegible]

SEE ADDITIONAL RECORDS

PAST MEDICAL HISTORY ☑ NONE

☐ DIABETES

☐ HYPERTENSION

☐ KIDNEY DISEASE

☐ PULMONARY DISEASE

☐ ARTHRITIS ☐ MIGRAINE HEADACHE

☐ CARDIO-VASC. DISEASE

☐ PSYCH. DISORDER

☐ SEIZURE DISORDER ☐ SUBSTANCE ABUSE

☐ CVA

☐ OTHER

☐ LAST MENSTRUAL PERIOD

☐ LAST TETANUS

HOME MEDS ☑ NONE ☐ UNSURE OF NAME/DOSE

PHYSICIAN HISTORY & PHYSICAL FINDINGS

TIME:

MVA, fx-dislo. (R) ankle
bimalleolar fx (L) ankle
bimalleolar Fx ankle

(R) ankle dislo. reduced
Pillow splints bilaterally
Admit

ALLERGIES ☐ NKA

☐ NPO HT ____ WT ____

ADMISSION	BP 150/90	T 99.3	P 92	R 16
TIME	BP	T	P	R

PHYSICIAN ORDERS

[redacted]

NURSING INTERVENTIONS

... irrigation per [redacted] pillow splints applied.

MEDICAL TREATMENT

MEDICATIONS ADMINISTERED

Versed ... IV 1400
Morphine ... IV
[illegible] [redacted]

IMPRESSION/PHYSICIAN DX

☐ O_2

☐ CARDIAC MONITOR

DISPOSITION TIME 1915

☐ HOME

☐ ADMIT TO [redacted]

☐ TRANSFER TO

☐ OTHER [redacted]

DEPART VIA: ☐ AMBULATORY ☐ WHEELCHAIR ☑ STRETCHER ☐ AMBULANCE ☐ OTHER

DISPOSITION CONDITION: Stable

ADMITTING PHYSICIAN: [redacted]

ABOVE PER WRITTEN/VERBAL ORDERS OF M.D. IN CHARGE: (SIGNATURE)

FOLLOW-UP INSTRUCTIONS

See Flow Sheet

☐ ACIS GIVEN INSTRUCTIONS WRITTEN BY:

I CERTIFY THAT I UNDERSTAND AND HAVE RECEIVED A COPY OF THE ABOVE MEDICAL INSTRUCTIONS

X

PATIENT OR NEAREST RELATIVE | RELATIONSHIP | DATE | TIME

WHITE - Chart • PINK - Emergency Room • CANARY - Physicians • GOLDENROD - Anesthesiology

HOSPITAL
KY [redacted]

PATIENT:
ATTENDING: , MD
MR#:
LOCATION:
DOB:

DISCHARGE SUMMARY

ADMISSION DATE: [redacted]94

DISCHARGE DATE: [redacted]/94

DISCHARGE DIAGNOSES:
1. FRACTURED DISLOCATION OF THE RIGHT ANKLE, BIMALLEOLAR FRACTURE OF THE LEFT ANKLE.
2. LACERATIONS OF THE LEFT LEG.

OPERATION:
Debride, irrigate, tube and close laceration of the left leg,closed reduction percutaneous screw fixation using 2 cannulated screws, medial malleolar fracture of the left ankle with application of short leg cast, open reduction and internal fixation of fracture dislocation of right ankle, application of long leg cast.

SUMMARY: This 28 year old lady was admitted to the hospital following a motor vehicle accident in which she sustained fracture dislocation of her ankle on the right, lacerations and fracture of her left ankle. She was seen in the emergency room, admitted and was subsequently taken to the operative suite. She underwent debridement, irrigation and delay primary closure of her lacerations with internal fixation, medial malleolar fracture on the left with open reduction internal fixation of the right ankle. Post operatively she has done very well. She has learned transfers and she is aware that she must remain nonweight bear on both her lower extremities. She is afebrile and has reached maximum hospital benefit. She is discharged at this time to be followed on an outpatient basis.

DISCHARGE MEDICATIONS:
1. Tylox prn pain.

She is to follow up in approximately one week to ten days.

_____, MD

D:[redacted]/94 T:[redacted]/94

Hospital
, Kentucky

EMERGENCY ROOM FLOW SHEET

Date:

VITAL SIGNS

TIME	BP	P	R	T	EYES	MOTOR	VERB.	COMA SCALE	PUPIL R	PUPIL L
1410	110/70	78	16							
1420	120/70									

TIME / OBSERVATIONS

TIME	OBSERVATIONS
1400	Area (R) ankle splinted c̄
	pillow splint applied
	Pt Awake. Awaiting to [illegible]
	[redacted] RN
1420	Pt easily awakens Denies
	discomfort
1430	Report called to floor Rn
	awaiting CXR [redacted] RN
1500	To Xray on stretcher floor
	Pt transferred to floor in
	stable cond [redacted] RN

GLASCOW COMA SCALE

EYE OPENING	BEST MOTOR RESPONSE	BEST VERBAL RESPONSE	NEURO KEY PUPIL SIZES (mm)
4 - Spontaneously	6 - Obeys Commands	5 - Oriented	1 - ● 4 - ●
3 - To Speech	5 - Localizes Pain	4 - Confused	2 - ● 5 - ●
2 - To Pain	4 - Withdrawal To Pain	3 - Inapp. Words	3 - ● 6 - ●
1 - None	3 - Abn. Flexion (Pain)	2 - Incom. Sounds	R - Reactive (Brisk)
	2 - Abn. Extension (Pain)	1 - None	S - Reactive (Sluggish)
	1 - None		N - Non-Reactive

MEDICATIONS

TIME	MEDS	ROUTE	INIT.	RELIEF OBTAINED?

PARENTERAL/BLOOD

TIME	#	SOLUTIONS/ADDITIVES	SITE	INFUSION DEVICE	AMOUNT INFUSED	FINISH TIME

TOTAL INTAKE:

TOTAL OUTPUT:

EKG

Cardiac Rhythm: ____________

Strip Documented: Yes _______ No _______

SIGNATURES

[redacted] RN

Chart Copy - WHITE • ER Copy - PINK

HOSPITAL
.KY[redacted]

PATIENT:
ATTENDING: , MD
MR#:
LOCATION:
DOB:

HISTORY AND PHYSICAL

DATE OF ADMISSION: [redacted]94

HISTORY OF PRESENT ILLNESS: This is a 28-year-old lady who was involved in a motor vehicle accident when the vehicle she was driving struck a car that pulled out in front of her driving the front end of the car back into the driver's compartment. She denies any loss of consciousness, complains of pain in her lower extremities, no other pain. She was initially seen at [redacted] Hospital where she was evaluated and was noted to have no problems except injuries to her lower extremities. X-rays there revealed a fracture dislocation of her right ankle, fracture of her left ankle. She was subsequently transferred to our care.

PHYSICAL EXAMINATION:
GENERAL: She presents awake, alert and oriented. Normocephalic. EOMS intact. Nasopharynx is clear.
NECK: No bruits are appreciated. Trachea is midline.
LUNGS: Clear to auscultation.
CARDIAC: Regular rate and rhythm.
ABDOMEN: Soft with normal bowel sounds. No back tenderness.
PELVIS: Stable.
LOWER EXTREMITIES: Shows that there is an obvious dislocation of her right ankle. There are multiple scratches and abrasions on her right lower extremity. She does have intact pulses, relates decreased sensation in the first web space. She is able to dorsal flex and plantar flex her toes. The left lower extremity shows some soft tissue lacerations and an avulsion type laceration of the anterior shin on the left. This does not appear to go down to bone. It is involving only soft tissue. She also has multiple nicks and abrasions elsewhere. She has good dorsalis pedis pulse, posterior tibial pulse. She is able to dorsal flex and plantar flex her toes well and relates intact sensation in her foot.

Review of her x-rays show that she has a lateral dislocation of her right ankle. She has an essentially nondisplaced medial malleolar fracture and fracture of her fibula that is an incomplete type of fracture. We have, under IV sedation, reduced her right ankle in the emergency room, placed her in pillow splints, placed sterile saline dressings on the lacerations, admitted her to the hospital and will plan

HISTORY AND PHYSICAL

---

on taking her to the operating room tomorrow for open reduction, internal fixation of both of her fractured ankles. Will also debride, irrigate, and close wounds at that time.

_____
, MD

D: [redacted]/94 T: [redacted]94

HOSPITAL
.KY[redacted]

PATIENT:
MR#:
ATTENDING: , MD
LOCATION:
DOB:

REPORT OF OPERATION

DATE OF SURGERY: [redacted]94

NAME OF SURGEON: [redacted] MD

PREOP DX:
1. Lacerations x 2, left leg, with slightly displaced medial malleolus, nondisplaced lateral malleolar fracture, left ankle.
2. Fracture dislocation of right ankle with comminuted fibular fracture at diaphyseal/metaphyseal junction. Comminuted medial malleolar fracture, right ankle.

POSTOP DX: Same.

OPERATION:
1. Debride, irrigate, tube and close lacerations of left leg with tubing of distal laceration.
2. Closed reduction and percutaneous screw fixation using two cannulated screws, medial malleolar fracture left ankle. Application of short leg cast.
3. Open reduction, internal fixation with Rush pin, fibular fracture.
4. Open reduction, internal fixation medial malleolus with two cannulated screw fixation, right ankle. Application of long leg cast.

ANESTHESIA: MAC/Epidural.

DETAILS OF OPERATIVE PROCEDURE: With the patient under good epidural anesthetic, both lower extremities were prepped and draped in the usual manner. The left leg was exsanguinated, the tourniquet inflated. Attention was turned to the two lacerations. A small, approximately 1 to 1.5 cm. laceration was overlying the region of the tibial tubercle. This was debrided. It was copiously irrigated with antibiotic solution and closure was carried out by closing the subcutaneous tissue with 3-0 undyed Vicryl then the skin with 3-0 nylon. The more distal laceration was a larger, complex, stellate type laceration involving muscle belly of the anterior compartment. This laceration was debrided, was thoroughly irrigated with antibiotic solution. A tube for irrigation, suction, drainage was placed deep in the wound. The muscle belly was closed with 0-undyed Vicryl. The subcutaneous tissue was closed with 2-0 Vicryl and then the skin was closed with 3-0 nylon.

REPORT OF OPERATION

Attention was then turned to the ankle, where, with C-arm control, the ankle was manipulated. The medial malleolus was maintained in good position, was fixed with two guide pins and then the guide pins measured and stabilized using cannulated screws passed over the guide pins and screwed down until good fixation was obtained. Again, C-arm control was used to verify position and alignment. The ankle mortis was noted to be well maintained in good position and alignment. The fracture appeared to be firmly fixed.

Attention was then turned to the right ankle after these wounds had been dressed and a bulky dressing applied until the cast could be completed. The right ankle was then exsanguinated with an Esmarch bandage. The tourniquet inflated. At this the tourniquet was deflated on the left ankle. A lateral incision was made along the line of the fibula, dissection was carried out sharply through the skin and subcutaneous tissue down to and exposing the fracture in the comminuted portion so the proximal most fragment could be identified, as well as the distal fragment, down to the tip of the lateral malleolus. A curvilinear incision was also made around the medial malleolus. Dissection carried out sharply through skin and subcutaneous tissue. The saphenous vein identified and protected. The fracture medially was identified. Soft tissue was cleared out of it. It was irrigated and debrided of all blood clot. The whole ankle joint was copiously irrigated with antibiotic solution from the medial side, and then attention was turned back to the lateral side. This was irrigated. A Rush pin was placed in the tip of the lateral malleolus, driven intramedullarily up to the fracture site, across the fracture site, and into the intramedullary portion of the proximal fragment. Once this was established, the comminuted fragments were pulled back around to maintain length, and stabilized with #2 Vicryl sutures. The wound again was irrigated. Closure was carried out by closing the fascia with a running 0 Vicryl suture, the subcutaneous tissue closed with 2-0 Vicryl and the skin closed with wide skin staples. The medial side of the ankle, the medial malleolus was reduced, there was noted to be comminution at the posterior aspect of it where bone chips had been lost, but it was placed near anatomic position, was fixed with two guide pins from the cannulated screws. These guide pins were measured and then appropriate sized cannulated 4.0 screws were used to stabilize the medial malleolus. With this completed, C-arm was moved in and verified good position and alignment. This medial side was then again irrigated. It was closed by closing the subcutaneous tissue with 2-0 Vicryl and the skin with skin staples. The wounds were all dressed with

REPORT OF OPERATION

Betadine and Adaptic. Sterile fluffs, sterile Sof-Rol and a long leg bent knee cast with the ankle in neutral position was applied.

Then the bulky dressing was removed from the wounds on the left ankle. It was redressed with Betadine and Adaptic, fluffs, sterile Sof-Rol, and a short leg cast with ankle in neutral position was applied.

A this time, the tourniquet on the right ankle had been released, as had the left leg tourniquet been released earlier. The operation was terminated. The patient was transferred off the operating table to the hospital bed and subsequently to the Post Anesthesia Care Unit in satisfactory condition.

[redacted], MD

D: [redacted]/94 T: [redacted]94

********** DISCHARGE SUMMARY - DO NOT DESTROY **********

BLOOD CULTURES

[BLOOD,PERIPHERAL]

COLLECTED -[redacted]94 2030 (94:B006624S)
SPECIAL INSTRUCTIONS? BLOOD CULTURES X 2 15 MINS. APART
COMMENTS? PLEASE NOTIFY NURSE AFTER 2ND BC DRAWN, SO ANTIBIO
IS COLLECTION SITE PERIPHERAL OR CENTRAL LINE? P
IS THIS A NEUTROPENIC PATIENT? N

BLOOD CULTURE
FINAL: NO GROWTH - 5 DAYS

COLLECTED -[redacted]94 2045 (94:B006625R)
SPECIAL INSTRUCTIONS? BLOOD CULTURES X 2 15 MINS. APART
COMMENTS? PLEASE NOTIFY NURSE AFTER 2ND BC DRAWN, SO ANTIBIO
IS COLLECTION SITE PERIPHERAL OR CENTRAL LINE? P
IS THIS A NEUTROPENIC PATIENT? N

BLOOD CULTURE
FINAL: NO GROWTH - 5 DAYS

********** DISCHARGE SUMMARY - DO NOT DESTROY **********

ROUTINE HEMATOLOGY

COLLECTED	WBC (4.8-10.8) TH/MM3	RBC (4.2-5.4) M/MM3	HEMOGLOBIN (12.0-16.0) G/DL	HEMATOCRIT (37-47) %	MCV (81-99) FL
05/17 0550			10.7 L	30.5 L	
05/16 0522			10.9 L	31.4 L	
05/15 0522			11.1 L	31.8# L	
05/14 0512			13.0	37.1	
05/13 1547			12.5	37.3	
05/12 1738	17.5 H	4.20	12.8	37.0	88.0

COLLECTED	MCH (27-31) PG	MCHC (33-37) G/DL	RDW (11.5-14.5) %	PLATELET (130-400)	MPV (7.4-10.4) FL	SEG (50-65) %
05/12 1738	30.6	34.7	12.9	307	8.4	85 H

COLLECTED	BAND (0-5) %	LYMPHS (20-40) %	MONOCYTES (0-10) %
05/12 1738	4	8 L	3

ROUTINE URINALYSIS

COLLECTED	COLOR	CHARACTER	GLUCOSE	BILIRUBIN	KETONES
05/13 0335	YELLOW	CLEAR	NEGATIVE	NEGATIVE	NEGATIVE

COLLECTED	SPECIFIC GRAV.	OCCULT BLOOD	PH	PROTEIN	UROBILINOGEN (0.1-1.0) EU/DL
05/13 0335	1.015	NEGATIVE	6.0	NEGATIVE	0.2

COLLECTED	NITRITE	LEU.ESTERASE
05/13 0335	NEGATIVE	NEGATIVE(1)

NOTE: (1) MICROSCOPIC NOT INDICATED

HOSPITAL , KY [redacted]

DEPARTMENT OF RADIOLOGY
[redacted]

RADIOLOGY REPORT

NAME [redacted]
PHYS [redacted]
DOB: [redacted] AGE: 28 SEX: F
ACCT: [redacted] LOCATION: [redacted]
EXAM DATE: [redacted] STATUS: [redacted]
RADIOLOGY NO: [redacted]
UNIT NO: [redacted]

EXAMS: CHEST 1 VIEW

History: Bilateral fx ankles

CHEST, ONE VIEW: This film was made AP and semiupright. The lungs are well aerated and free of infiltrate. The costophrenic angles are sharp. The heart is normal in size and the mediastinum is not wide.

IMPRESSION:

1) NORMAL ONE VIEW CHEST EXAMINATION.

[redacted], M.D.

CC: [redacted]

TRANSCRIBED DATE/TIME: [redacted] (1858)
TRANSCRIPTIONIST: [redacted]
PRINTED DATE/TIME: [redacted] (1901)

MEDICAL RECORDS COPY

HOSPITAL , KY [redacted]

DEPARTMENT OF RADIOLOGY

[redacted]

RADIOLOGY REPORT

NAME:
PHYS:
DOB: AGE: 28 SEX: F
ACCT: LOCATION: [redacted]
EXAM DATE: [redacted]/94 STATUS: [redacted]
RADIOLOGY NO:
UNIT NO: [redacted]

EXAMS: ANKLE, ANKLE

BILATERAL ANKLE FRACTURES

LEFT ANKLE; TWO VIEWS: These films were made post-op in the recovery room. This patient has a fracture of the medial malleolus. The fracture has been stabilized in good position with two bone screws and is now enclosed in a plaster cast. The ankle mortise is normal.

RIGHT ANKLE; TWO VIEWS: The right ankle is enclosed in a plaster cast. The patient has a fracture of the medial malleolus, stabilized with a metal screw, and there is a fracture of the distal fibula, stabilized with an intramedullary K-wire. The ankle mortise is normal. There is rather extensive soft tissue swelling around the ankle, and there are also skin sutures.

IMPRESSION:

1) FRACTURE OF THE MEDIAL MALLEOLUS OF THE LEFT TIBIA, STABILIZED IN GOOD POSITION WITH TWO BONE SCREWS AND A PLASTER CAST.

2) FRACTURED MEDIAL MALLEOLUS OF THE RIGHT TIBIA, STABILIZED WITH A BONE SCREW.

3) COMMINUTED FRACTURE OF THE RIGHT FIBULA SHAFT, STABILIZED WITH AN INTRAMEDULLARY ROD AND A PLASTER CAST.

, M.D.

CC: [redacted]

TRANSCRIBED DATE/TIME: [redacted]/94 (1656)
TRANSCRIPTIONIST: [redacted]
PRINTED DATE/TIME: [redacted]/94 (1859)

MEDICAL RECORDS COPY

TRANSPORTATION RESEARCH CENTER

Indiana University
[redacted] Indiana [redacted]

ON-SITE AIR BAG INVESTIGATION

SELECTED PHOTOGRAPHS

CASE NO. - 94-09
FLEET - PRIVATE VEHICLE
LOCATION [redacted] KENTUCKY
ACCIDENT DATE - [redacted] 1994

A total of ninety color copies of photographs are presented and referenced as Photograph #01 through Photograph #90. Photographs numbered **#06, #09, #11, #21, #23,** and **#26** were taken and made available by the Crittenden County, Kentucky, Sheriff Department. The remainder of these photographs were taken by the Transportation Research Center.

[redacted], 1994

Contract Number: DTNH22-94-D-17058

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
National Center for Statistics and Analysis
Washington, D.C. 20590

01 -- 1991 Chevrolet Corsica's westward, uphill (grade ~ 9 %), path of travel approximately 120 meters east of first harmful event

02 -- 1991 Chevrolet Corsica's westward, uphill (grade ~ 9 %), path of travel approximately 85 meters east of first harmful event

03 -- 1991 Corsica's westward, uphill (grade ~ 9 %), path of travel ~ 65 meters east of POI & west of right-hand curve's beginning

04 -- 1991 Corsica's westward path of travel as Corsica crosses over centerline in right-hand curve-- ~ 30 meters east of POI

05 -- 1991 Corsica's westward travel path as Corsica enters eastbound lane - 10 meters east of POI; NOTE: orange cone marks FRP area

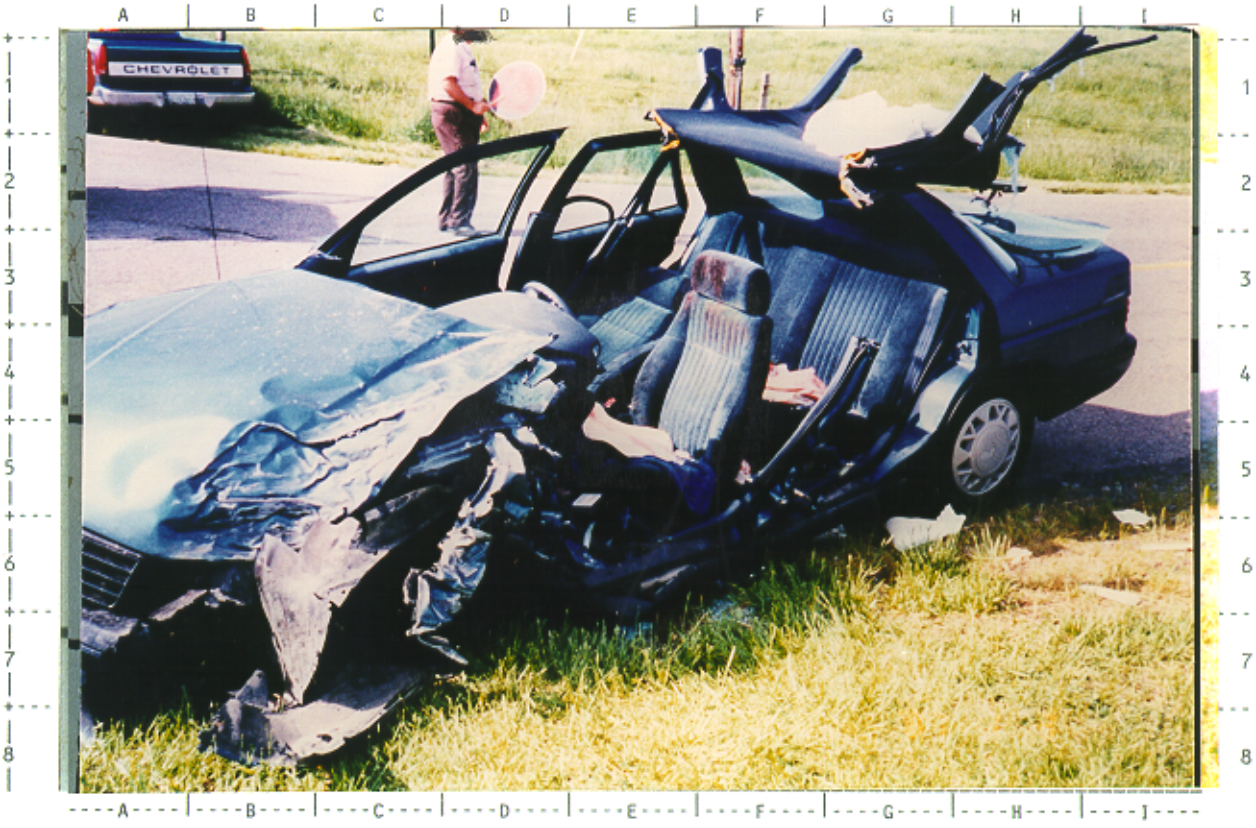
06 -- On-scene view of 1988 Chevrolet C-1500 pickup's left front skid-mark and point of deflection looking west in eastbound lane

07 -- Westward view of POI (circle) in eastbound lane & 1988 pickup's skidmark (dash crayon); NOTE: orange cone marks FRP area

08 -- 1991 Chevrolet Corsica's approximate final rest position area looking west

09 -- On-scene view of 1991 Chevrolet Corsica's final rest position looking west--Chevrolet is heading east at FR on north shoulder

10 -- View of glass (see cells F6--G6) at final rest position of 1991 Chevrolet Corsica



11 -- On-scene southwest view of 1991 Chevrolet Corsica at final rest after driver's extracation; NOTE: cut left B-pillar & blood

12 -- Looking back (eastward) at 1991 Chevrolet Corsica's path of travel from point of impact

13 -- 1988 Chevrolet C-1500 pickup's eastward, uphill (grade ~ 4 %), path of travel approximately 100 meters west of point of impact

14 -- 1988 Chevrolet's eastward, uphill (grade ~ 4 %), travel path ~ 70 meters west of POI & east of left-hand curve's beginning

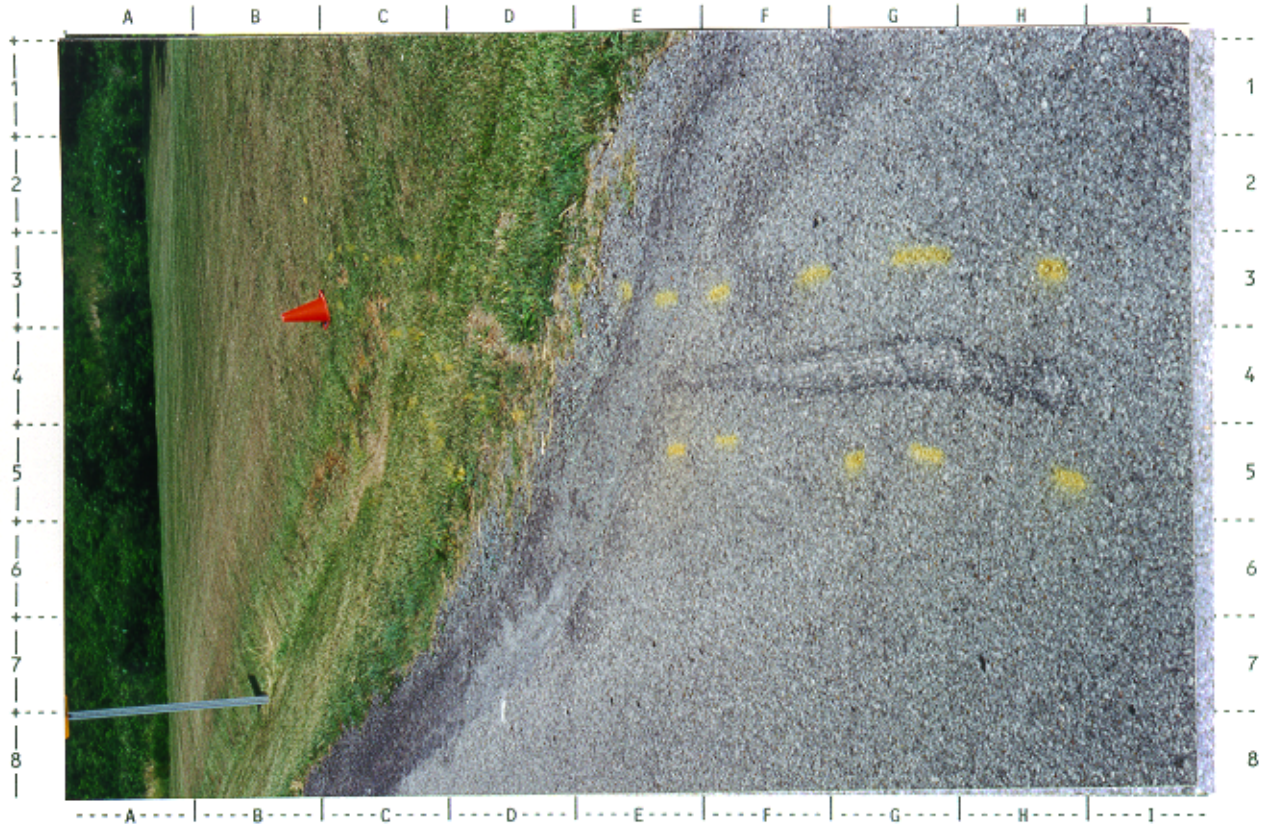
15 -- 1988 Chevrolet's eastward, uphill (grade ~ 4 %), travel path, in the left-hand curve, ~ 45 meters west of point of impact

16 -- 1988 Chevrolet's eastward travel path near hillcrest ~ 20 meters west of POI; NOTE: orange cone marks Corsica's FRP (cell X#)

17 -- 1988 Chevrolet's eastward travel path after cresting hill near impact realization point; NOTE: orange cone marks FRP area

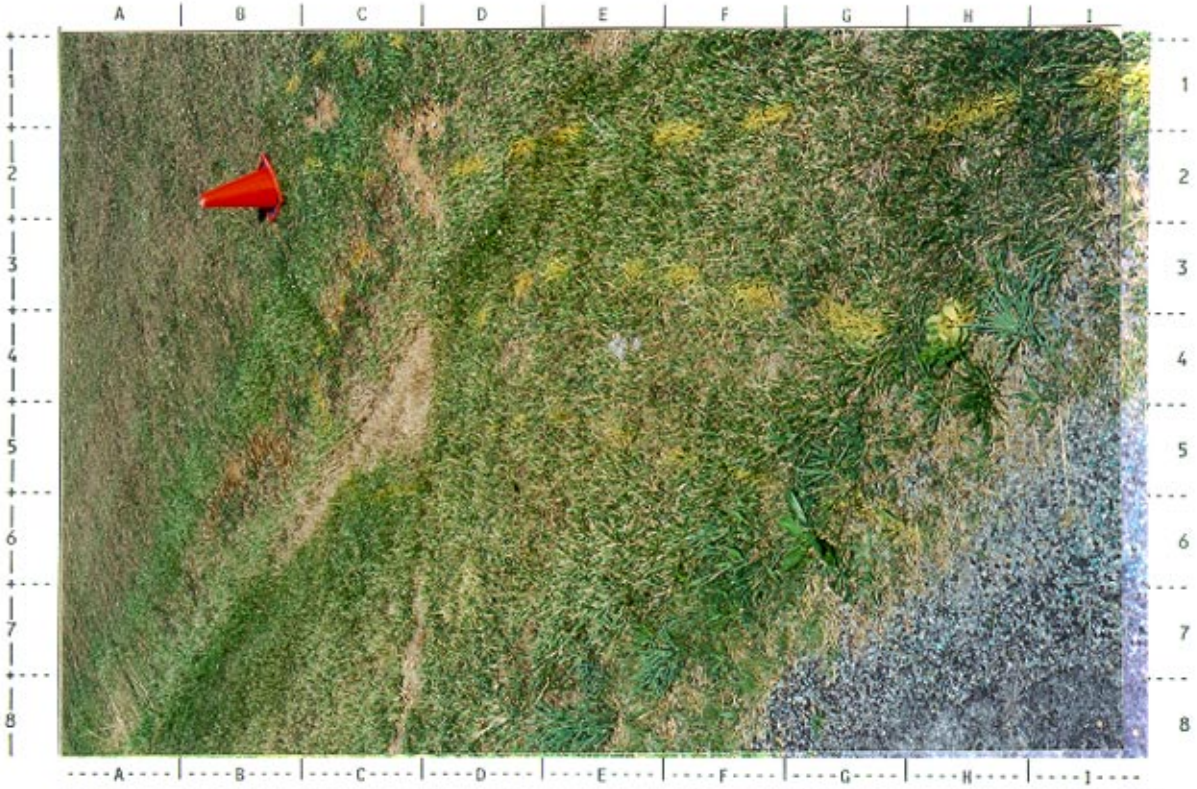
18 -- Eastward view of POI (circle) in eastbound lane & 1988 pickup's skidmark (dashed spray chalk); NOTE: orange cone marks FRP area

19 -- Close-up view of 1988 Chevrolet's LF skid and deflection marks along with gouge marks and POI circle--looking eastward



20 -- Close-up view of 1988 Chevrolet pickup's LF gouge mark leading to area of final rest marked by orange cone--looking southeast

21 -- On-scene view of 1988 Chevrolet pickup's final rest position looking east--Chevrolet is heading north at FR on south shoulder



22 -- Southeast view of marks on grass from 1988 Chevrolet pickup's LF wheel rim leading to final rest area

23 -- On-scene view of 1988 Chevrolet C-1500 pickup at final rest; NOTE: driver is entrapped inside vehicle

24 -- Northeast view of dead grass killed by radiator leakage from the 1988 Chevrolet C-1500 pickup at final rest

25 -- Westward view of 1988 Chevrolet C-1500 pickup's final rest position; NOTE: radiator grass kill & gouge in grass from LF rim

26 -- On-scene westward view of front of 1988 Chevrolet pickup at FRP; NOTE: 1991 Chevrolet Corsica's FRP (see cells E1--F1)

27 -- Westward view of 1988 Chevrolet pickup's LF gouge marks, POI, hillcrest, & curve; NOTE: Corsica's FRP marked by orange cone

28 -- Westward close-up of 1988 Chevrolet pickup's LF skidmark, POI, and point of deflection

29 -- Looking back (westward) at 1988 Chevrolet C-1500 pickup's path of travel from POI; NOTE: orange cone marks FRP of Corsica

30 -- Frontal view of 1991 Chevrolet Corsica's front left damage with contour guage present

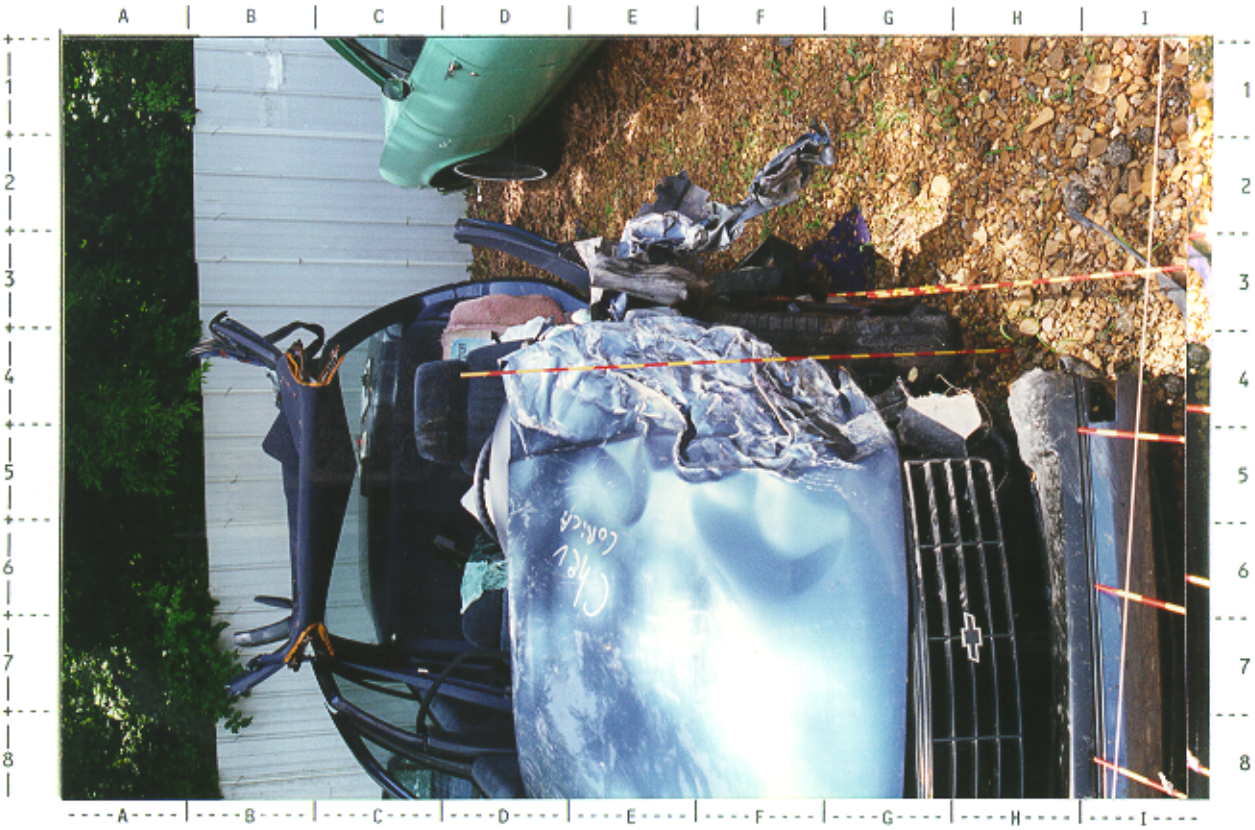
31 -- Front left view of 1991 Corsica's front left damage with contour guage present; NOTE: peeled-back roof and cut L A- & B-pillars

32 -- Front left (45 degree angle) view of 1991 Corsica's front left damage without contour guage present; NOTE: roof & cut pillars

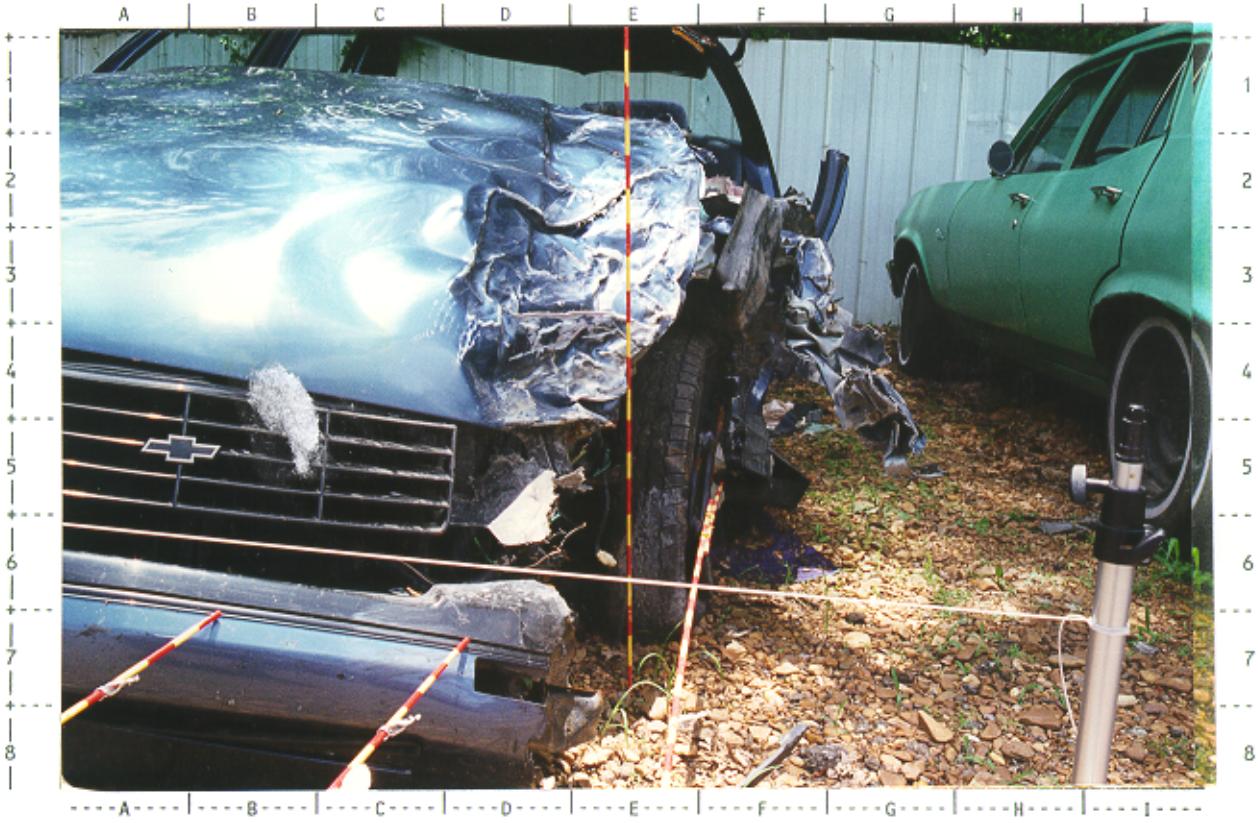
33 -- Front left (45 degree angle) view of direct damage to 1991 Chevrolet Corsica; NOTE: peeled-back roof and cut L A- & B-pillars

34 -- Front reference line viewed from left showing frontal damage to 1991 Chevrolet Corsica; NOTE: maximum crush and vertical rod

35 -- Front reference line viewed from right showing frontal damage to 1991 Chevrolet Corsica; NOTE: induced damage along front



36 -- View along 1991 Chevrolet Corsica's left side showing extensive FL corner damage; NOTE: maximum crush & vertical reference rod



37 -- Bumper level view along 1991 Chevrolet Corsica's left side showing extensive FL corner damage, maximum crush, & reference rod

38 -- Close-up front left (45 degree angle) view of 1991 Chevrolet Corsica's damage to left front tire and rim

39 -- Overhead left front view of crush to 1991 Chevrolet Corsica's left front fender crush

40 -- Overhead left center view of 1991 Chevrolet Corsica's driver area; NOTE: deployed air bag & roof peeled-back for extraction

41 -- Overhead left center view of interior surface of 1991 Chevrolet Corsica's peeled-back roof; NOTE: no visible contact evidence

42 -- Left back (45 degree angle) view of '91 Chevrolet Corsica; NOTE: direct contact to left A-pillar and roof corner (cells D1--E3)

43 -- Close-up of direct damage to '91 Chevrolet Corsica's left A-pillar and roof corner--viewed from back

44 -- Back view of 1991 Chevrolet Corsica's undamaged back

45 -- Right back view of 1991 Chevrolet Corsica's undamaged back and right side, except for peeled-back roof and induced FR damage

46 -- Front right view of frontal and extensive front left damage to 1991 Corsica; NOTE: peeled-back roof and undamaged RF A-pillar

47 -- Right side reference line viewed from front showing induced damage to 1991 Chevrolet Corsica's RF fender and front right corner

48 -- Damage to LF (driver's) door of 1991 Chevrolet; NOTE: red paint (1988 pickup's) transfer to top of window frame (cells G1--G2)

49 -- View of interior of 1991 Chevrolet Corsica's left front door; NOTE: no evidence of contact is visible

50 -- Damage to left rear door of 1991 Chevrolet Corsica; NOTE: door was removed during extraction process

51 -- Overhead right center view of 1991 Chevrolet Corsica's steering wheel and dash; NOTE: deployed air bag

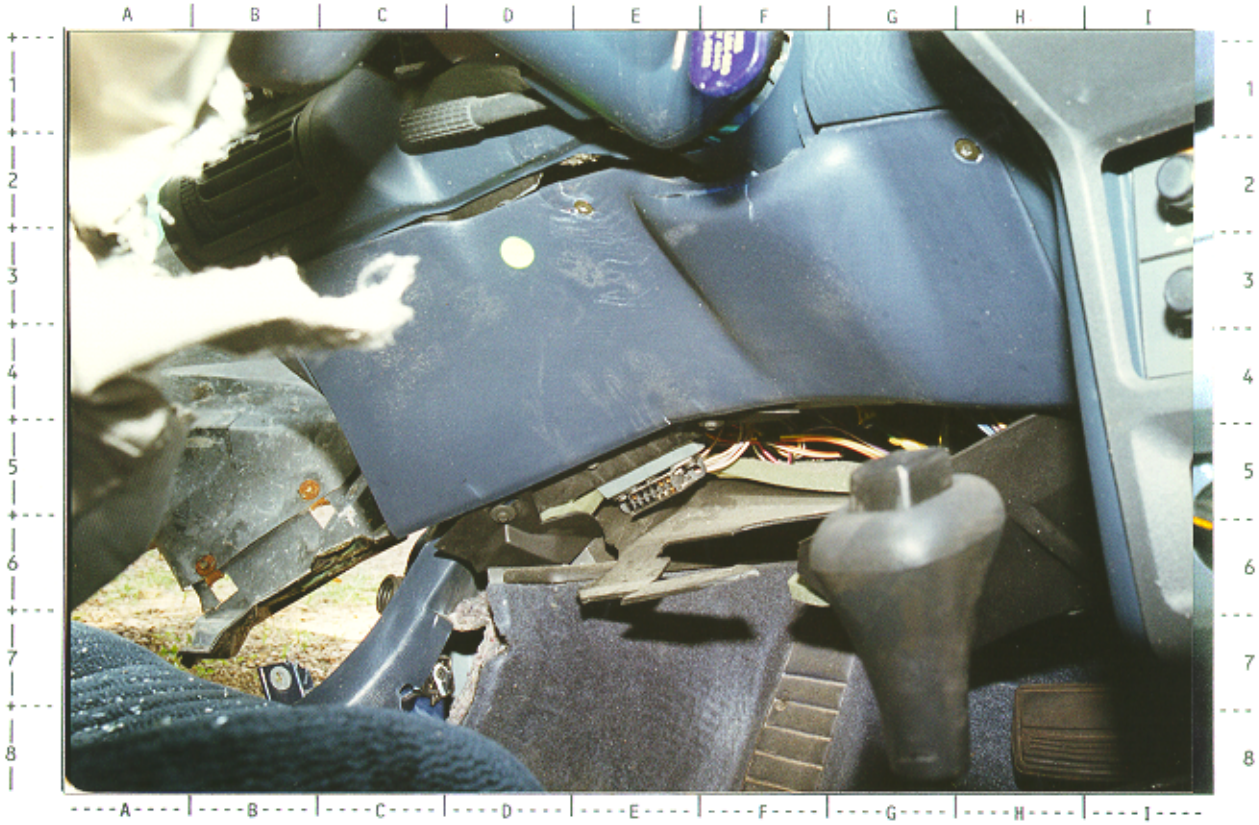
52 -- Overhead left center view of 1991 Chevrolet Corsica's undeformed steering wheel and deployed air bag

53 -- Overhead back left view of 1991 Chevrolet Corsica's driver seating area; NOTE: damage to air vent on left side of dash

54 -- Close-up view of 1991 Chevrolet Corsica's driver air bag with blood smudge and 2.5 centimeter tear

55 -- Close-up of underside tears in '91 Corsica's driver air bag most likely from L doors being placed in front seat during towing

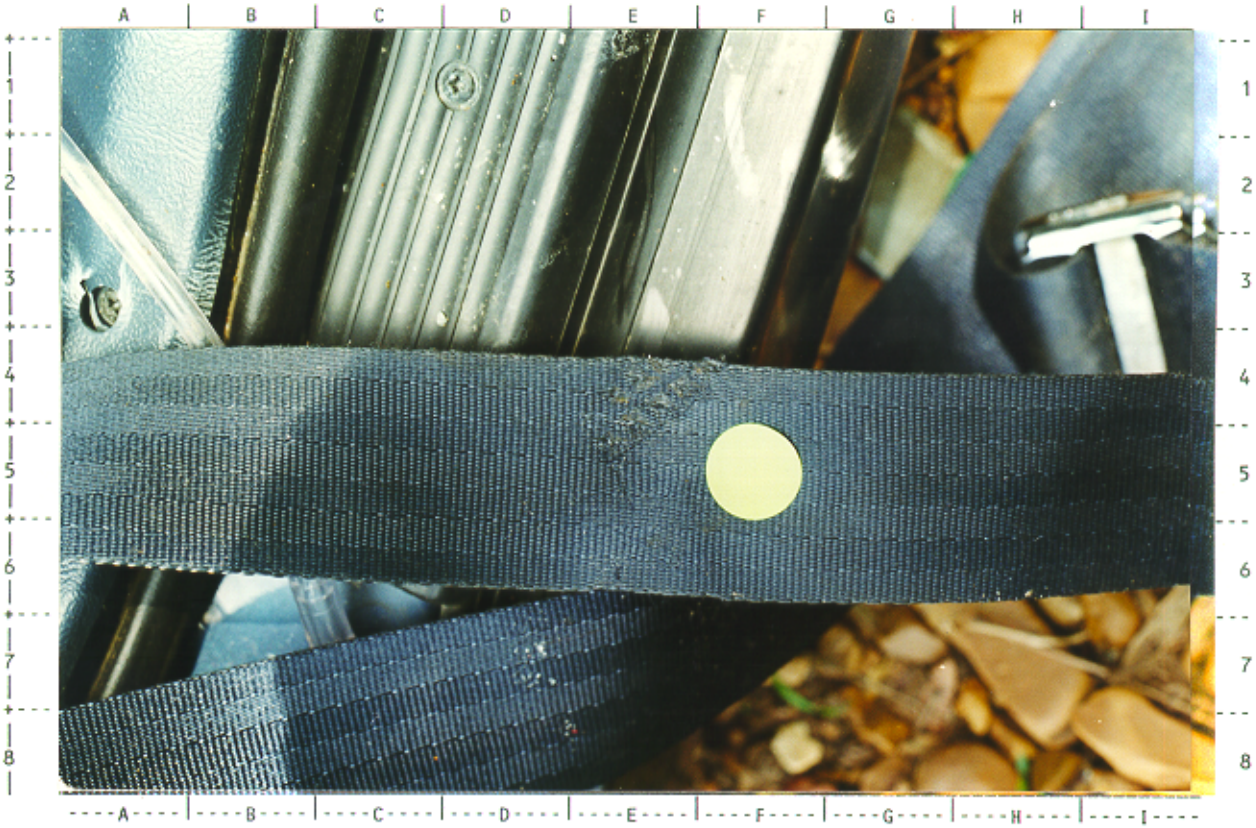
56 -- Interior of 1991 Chevrolet Corsica's lower left dash area viewed from left showing driver's left knee contact with knee bolster



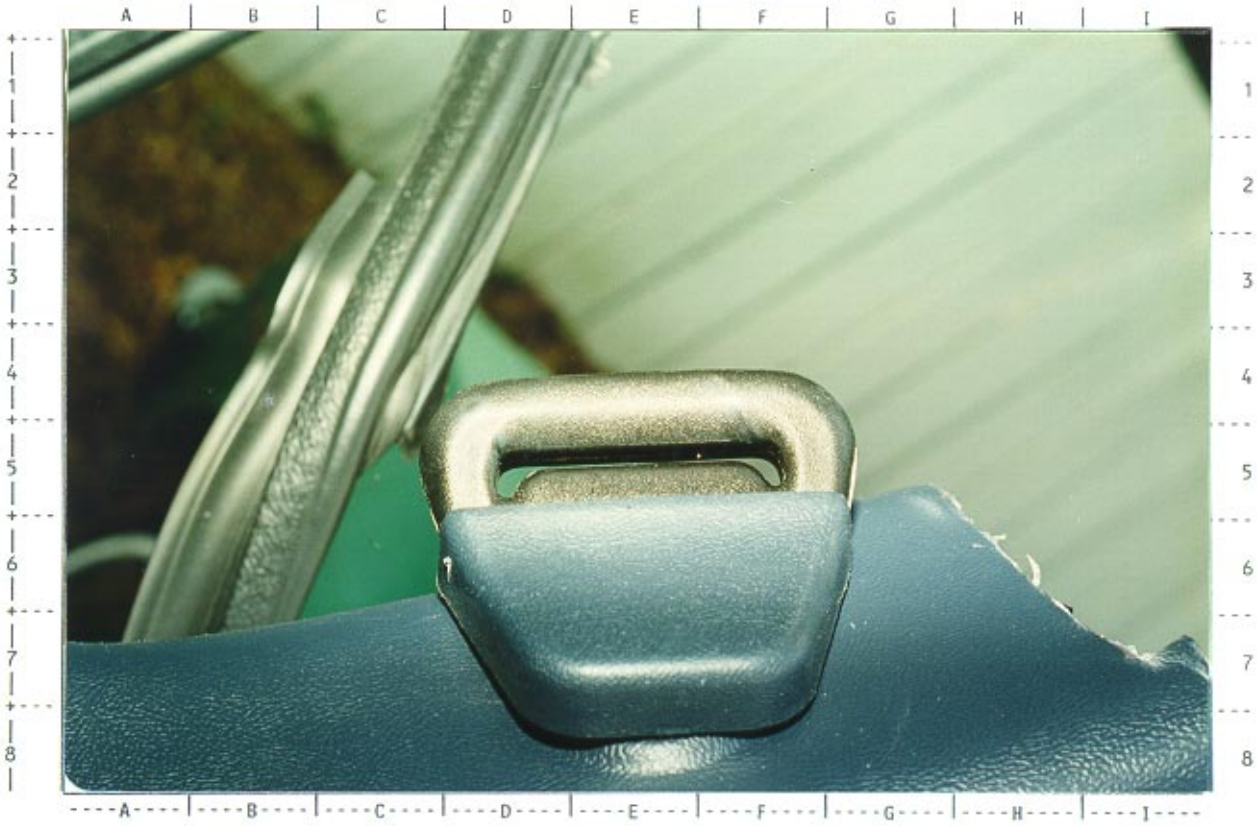
57 -- Interior of 1991 Chevrolet Corsica's lower left dash area viewed from center showing driver's left knee contact with knee bolster

58 -- Overhead left front view of blood stained left front (driver's) seat of 1991 Chevrolet Corsica; NOTE: cut left B-pillar

59 -- View from RF seat of 1991 Chevrolet Corsica's blood stained LF seat; NOTE: R side seat marks occurred most likely post-crash



60 -- Stress marks present on torso portion of '91 Chevrolet Corsica's driver seat belt; see cells D4--E5



61 -- Stress mark present on D-ring of '91 Chevrolet Corsica's driver seat belt retractor; see cells E4--F5

62 -- Frontal view of 1988 Chevrolet C-1500 pickup's front left damage with contour guage present

63 -- Front left view of '88 Chevrolet pickup's front left damage with contour guage present; NOTE: FL hood damage and vertical rod

64 -- Left front reference line view showing frontal damage to 1988 Chevrolet C-1500 pickup; NOTE: vertical reference rod

65 -- Front left view of damage to 1988 Chevrolet pickup; NOTE: hood damage (cells D2--E3) from contact with '91 Corsica's A-pillar

66 -- Front left close-up of damage to 1988 Chevrolet pickup; NOTE: damage to FL hood, LF wheel, & continuation along left side

67 -- Overhead left front view of damage to '88 Chevrolet C-1500 pick-up; NOTE: stress cracks to left windshield

68 -- Close-up of 1988 Chevrolet pickup's left front wheel damage; NOTE: broken steering rod and grass & mud in wheel rim

69 -- Close-up of direct damage to 1988 Chevrolet pickup's LF rim and also behind displaced left front wheel--viewed from left

70 -- Close-up of direct damage to 1988 Chevrolet pickup's LF rim and also behind displaced left front wheel--viewed from back left

71 -- Left back view of 1988 Chevrolet C-1500 pickup; NOTE: outward bowing to left front (driver's) door & induced cargo bed damage

72 -- Close-up of '88 Chevrolet C-1500 pickup's outwardly bowed LF door; NOTE: latch & striker are still holding door closed

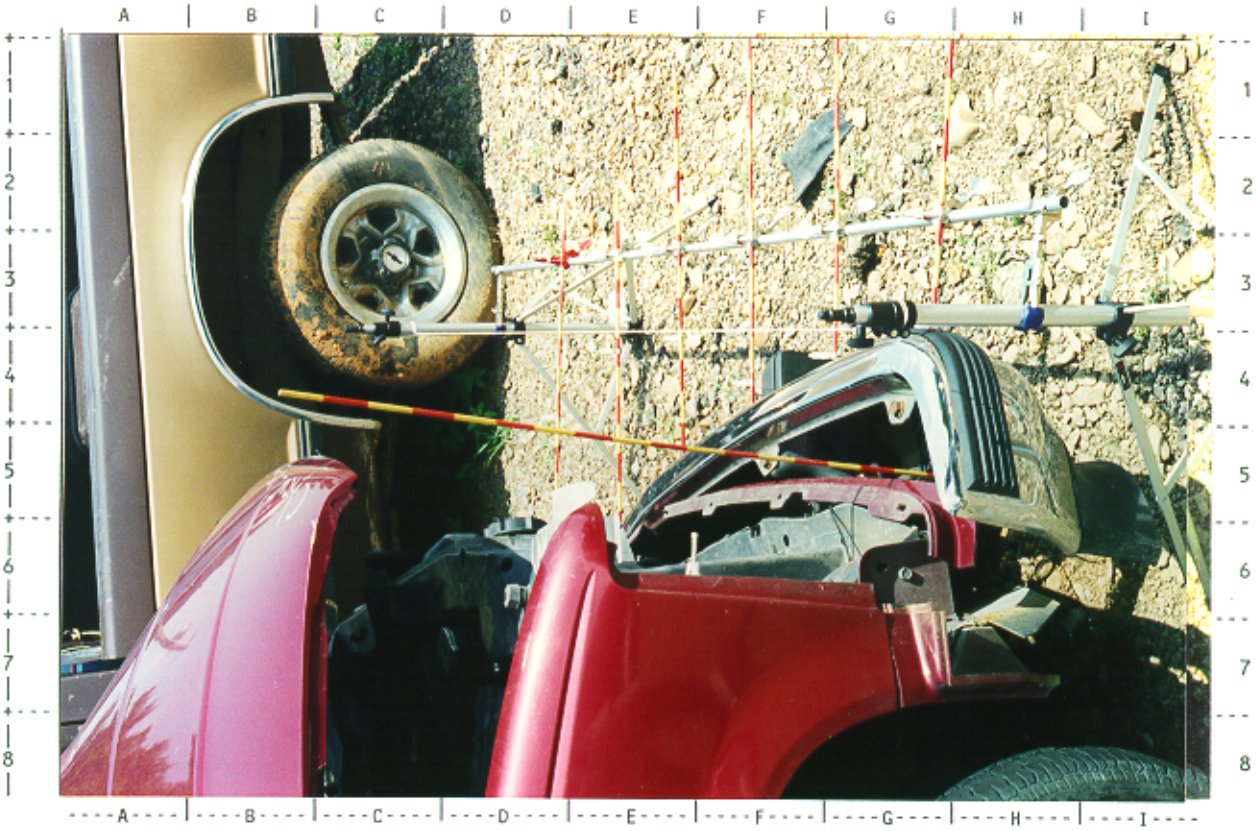
73 -- Left side reference line viewed from back shows frontal damaged to 1988 Chevrolet pickup; NOTE: undamaged back left corner

74 -- Back view of 1988 Chevrolet C-1500 pickup showing undamaged back side; NOTE: driver's door window frame is bent outwards

75 -- Right side reference line viewed from back shows induced damage to 1988 Chevrolet pickup; NOTE: shift between cab & cargo box

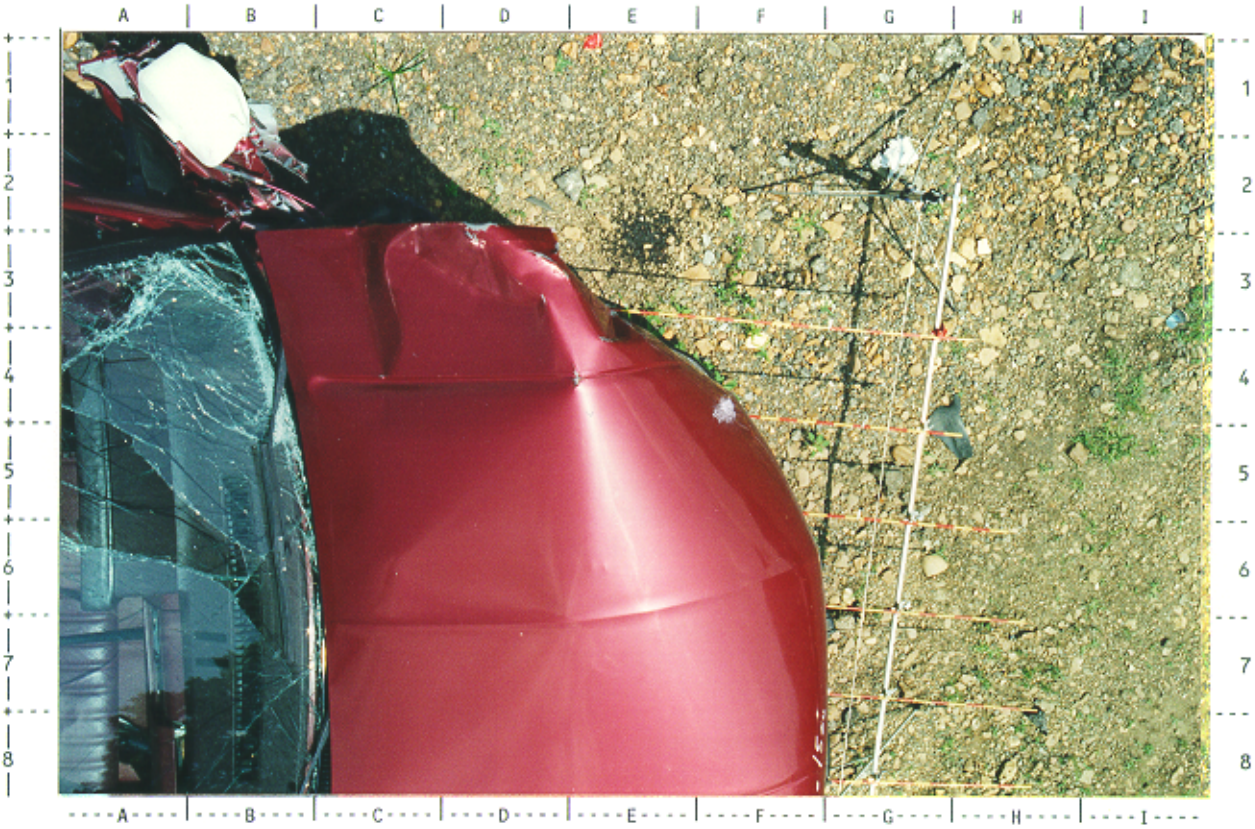
76 -- Right side view of 1988 Chevrolet C-1500 pickup showing undamaged right side except for induced damage to right front door

77 -- Right side reference line viewed from front does not show any damage to 1988 Chevrolet C-1500 pickup



78 -- Front reference line viewed from R with contour guage present shows damage to front left corner of '88 Chevrolet C-1500 pickup

79 -- Front reference line viewed from L with contour guage present shows damage to front left corner of '88 Chevrolet C-1500 pickup



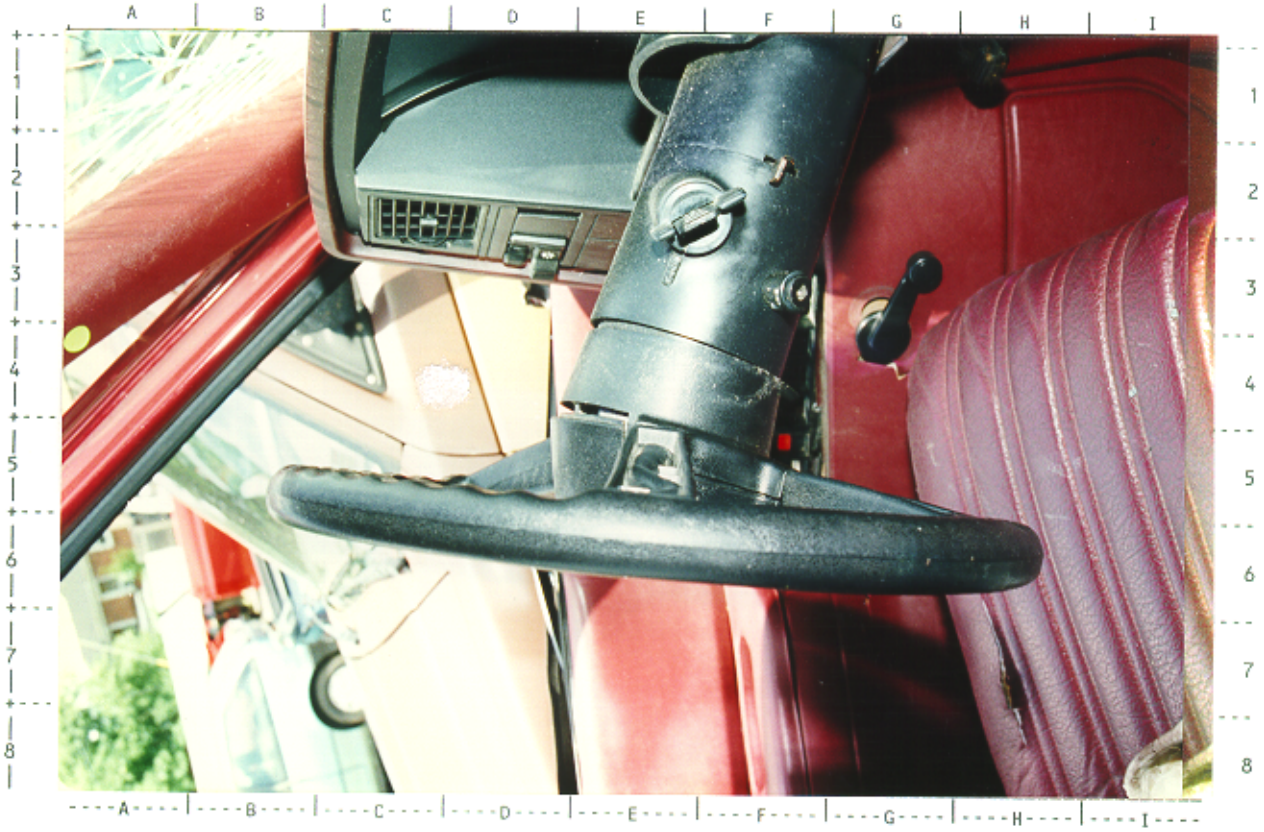
80 -- Overhead left front view with contour guage present of front left damage to 1988 Chevrolet C-1500 pickup

81 -- Interior view of driver's area of 1988 Chevrolet pickup; NOTE: contacts (dots) to door panel, steering wheel, & lower dash

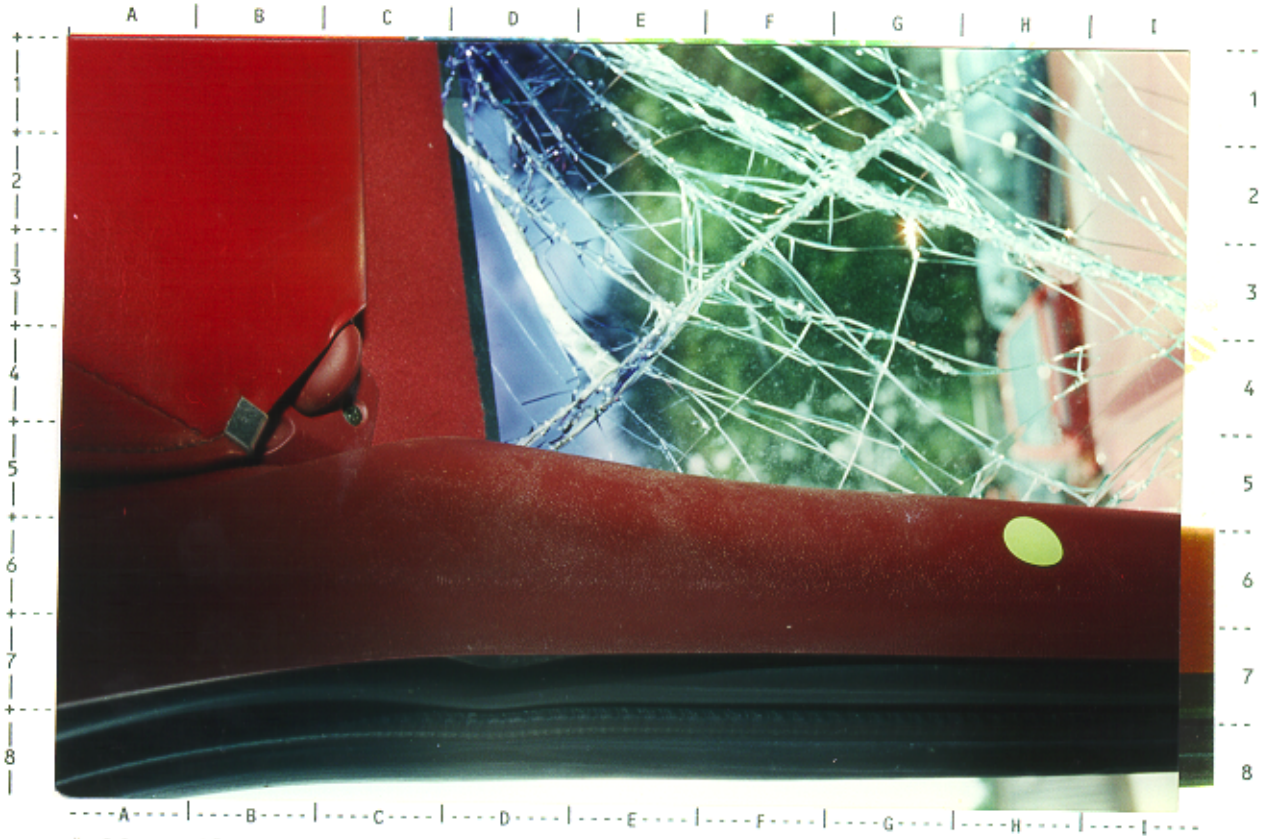
82 -- Close-up of contacts to 1988 Chevrolet pickup's lower dash from driver's knees; NOTE: entrapment occurred in toepan area

83 -- Close-up of left knee contact to 1988 Chevrolet pickup's left lower dash area; NOTE: entrapment occurred in toepan area

84 -- Deformed steering wheel in 1988 Chevrolet C-1500 pickup viewed from right front passenger side



85 -- Close-up of deformed steering wheel in 1988 Chevrolet pickup viewed from RF; NOTE: possible contact to L A-pillar (cell A4)



86 -- Close-up of possible contact to 1988 Chevrolet pickup's left A-pillar; NOTE: scuffing along A-pillar (cells C5--H6)

87 -- Close-up of probable contact to 1988 Chevrolet pickup's left door panel

88 -- Interior view of driver's seating area of 1988 Chevrolet pickup; NOTE: unused driver's 3-point lap and shoulder belt

89 -- Front center & right dash areas of 1988 Chevrolet pickup; NOTE: undamaged dash and minor intrusion to toepan area

90 -- Steering wheel & dash of 1988 Chevrolet pickup viewed from right exterior; NOTE: evidence of driver contacts (dots) on left dash